

State of California
The Resources Agency

DEPARTMENT OF WATER RESOURCES
Division of Operations and Maintenance

STATE WATER PROJECT OPERATIONS DATA

For the month of:
July 2004

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Governor
State of California

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Secretary for Resources
The Resources Agency

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MONTHLY HIGHLIGHTS

The following highlights are activities or actions that impacted State Water Project operations during the month of July 2004.

Statewide precipitation was 90 percent of average for the 2003-2004 water year as of July 31. Statewide runoff was 80 percent of average for the water year. Precipitation percentages are used in this report to express historical and regional comparisons. Additional and more specific information is available via the Internet at: "http://cdec.water.ca.gov/snow_rain.html".

On July 31, total storage in major SWP reservoirs was about 3.25 MAF, compared to 3.0 MAF at this time in 2003. The average storage in the major SWP reservoirs at the end of July is about 3.7 MAF. The July 31 storage at Lake Oroville was about 2.25 MAF as compared to 1.93 MAF last year. The State's share of San Luis Reservoir storage was about 362 TAF, as compared with 401 TAF at this time last year. On July 31, the combined storage in our southern reservoirs was about 643 TAF, compared with about 669 TAF at this time last year.

Through July, SWP water deliveries for 2004 were about 2.18 MAF. This is a combination of project, transfer, and exchange waters. This is about 238 TAF more than was delivered during the same period in 2003.

Throughout the month of July USBR and DWR agreed that the Delta was in balanced conditions with COA accounting.

On July 12 at 1730, a 12 year old child was reported missing at Castaic Lake. Sometime after 2100 the body was recovered, an apparent victim of drowning.

On July 13, an earthquake of magnitude 4.0 was reported at 1649. Located about 21 miles SE of Hollister with no SWP inspections required.

On July 31, vandalism was reported in the Delta Field Division along the California Aqueduct at 1350 hrs. All gates along the primary side from Howard Road south to Zacharias Road, (pools 6 and 7) were destroyed by a stolen caterpillar. The stolen equipment was abandoned in a pit near the aqueduct drain at mile marker +37.21.

Table 1. Antelope Lake

Daily Operation

(in acre-feet except as noted)

Capacity: 22,566 ac-ft

July 2004

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs					Computed Inflow	
				Regulated Release			Spill	Estimated Evaporation And Seepage		
				Stream-flow Maint.	Water Supply Contract	Water Right				
Jun 30	5001.30	21,920								
1	5001.20	21,829	-91	20	0	0	0	27	47	
2	5001.16	21,792	-37	20	0	0	0	1	21	
3	5001.11	21,747	-45	20	0	0	0	4	24	
4	5001.06	21,702	-45	20	0	0	0	4	24	
5	5001.00	21,647	-55	20	0	0	0	9	29	
6	5000.95	21,602	-45	20	0	0	0	4	24	
7	5000.89	21,548	-54	20	0	0	0	11	31	
8	5000.85	21,512	-36	20	0	0	0	1	21	
9	5000.78	21,448	-64	20	0	0	0	13	33	
10	5000.69	21,367	-81	20	0	0	0	22	42	
11	5000.64	21,323	-44	20	0	0	0	3	23	
12	5000.57	21,260	-63	20	0	0	0	13	33	
13	5000.51	21,206	-54	20	0	0	0	8	28	
14	5000.44	21,144	-62	20	0	0	0	11	31	
15	5000.38	21,090	-54	20	0	0	0	8	28	
16	5000.32	21,036	-54	20	0	0	0	8	28	
17	5000.25	20,974	-62	20	0	0	0	12	32	
18	5000.20	20,930	-44	20	0	0	0	12	32	
19	5000.13	20,868	-62	20	0	0	0	12	32	
20	5000.07	20,815	-53	20	0	0	0	13	33	
21	5000.01	20,762	-53	20	0	0	0	12	32	
22	4999.96	20,709	-53	20	0	0	0	13	33	
23	4999.88	20,638	-71	20	0	0	0	16	36	
24	4999.82	20,585	-53	20	0	0	0	13	33	
25	4999.77	20,541	-44	20	0	0	0	16	36	
26	4999.69	20,471	-70	20	0	0	0	16	36	
27	4999.62	20,409	-62	20	0	0	0	16	36	
28	4999.54	20,339	-70	20	0	0	0	16	36	
29	4999.48	20,286	-53	20	0	0	0	16	36	
30	4999.40	20,216	-70	20	0	0	0	16	36	
31	4999.34	20,164	-52	20	0	0	0	12	32	
Total cfs-days				---	620	0	0	358	978	
Total ac-ft				-1,756	1,230	0	0	711	1,941	
									185	

Table 2. Frenchman Lake

Daily Operation

(in acre-feet except as noted)

Capacity: 55,477 ac-ft

July 2004

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs						Computed Inflow (cfs)	
				Regulated Release			Spill	Estimated Evaporation And Seepage	Total Outflow		
				Stream-flow Maint.	Water Supply Contract	Water Right					
Jun 30	5566.78	27,940									
1	5566.74	27,899	-41	0	21	0	0	1	22	1	
2	5566.69	27,847	-52	0	22	0	0	4	26	0	
3	5566.63	27,786	-61	0	22	0	0	11	33	2	
4	5566.56	27,714	-72	0	22	0	0	14	36	0	
5	5566.50	27,653	-61	0	22	0	0	10	32	1	
6	5566.44	27,592	-61	0	25	0	0	8	33	2	
7	5566.37	27,521	-71	0	27	0	0	9	36	0	
8	5566.28	27,429	-92	0	30	0	0	16	46	0	
9	5566.20	27,348	-81	0	31	0	0	10	41	0	
10	5566.12	27,267	-81	0	31	0	0	10	41	0	
11	5566.04	27,186	-81	0	31	0	0	10	41	0	
12	5565.95	27,095	-91	0	31	0	0	15	46	0	
13	5565.83	26,974	-121	0	31	0	0	30	61	0	
14	5565.77	26,914	-60	0	29	0	0	2	31	0	
15	5565.71	26,854	-60	0	25	0	0	6	31	1	
16	5565.63	26,773	-81	0	23	0	0	17	40	0	
17	5565.57	26,713	-60	0	22	0	0	8	30	0	
18	5565.50	26,643	-70	0	21	0	0	14	35	0	
19	5565.43	26,573	-70	0	16	0	0	19	35	0	
20	5565.40	26,543	-30	0	13	0	0	2	15	0	
21	5565.35	26,494	-49	0	12	0	0	13	25	0	
22	5565.31	26,454	-40	0	9	0	0	11	20	0	
23	5565.27	26,414	-40	0	8	0	0	12	20	0	
24	5565.23	26,374	-40	0	8	0	0	12	20	0	
25	5565.21	26,354	-20	0	8	0	0	9	17	7	
26	5565.16	26,305	-49	0	18	0	0	12	30	5	
27	5565.05	26,196	-109	0	35	0	0	20	55	0	
28	5564.97	26,117	-79	0	46	0	0	5	51	11	
29	5564.84	25,988	-129	0	48	0	0	17	65	0	
30	5564.72	25,869	-119	0	41	0	0	19	60	0	
31	5564.60	25,751	-118	0	37	0	0	22	59	0	
Total cfs-days				---	0	765	0	0	368	1,133	29
Total ac-ft				-2,189	0	1,517	0	0	730	2,247	58

Table 3. Lake Davis

Daily Operation
(in acre-feet except as noted)

Capacity: 84,371 ac-ft

July 2004

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs						Computed Inflow (cfs)	
				Regulated Release			Spill	Estimated Evaporation And Seepage	Total Outflow		
				Stream-flow Maint.	Water Supply Contract	Water Right					
Jun 30	5765.14	49,706									
1	5765.11	49,616	-90	8	0	2	0	35	45	0	
2	5765.08	49,527	-89	8	0	2	0	35	45	0	
3	5765.06	49,467	-60	8	0	2	0	20	30	0	
4	5765.02	49,348	-119	8	0	2	0	50	60	0	
5	5764.99	49,256	-92	8	0	2	0	36	46	0	
6	5764.96	49,167	-89	8	0	2	0	35	45	0	
7	5764.93	49,077	-90	8	0	3	0	35	46	0	
8	5764.91	49,018	-59	7	0	3	0	20	30	0	
9	5764.89	48,958	-60	7	0	3	0	20	30	0	
10	5764.86	48,869	-89	7	0	3	0	35	45	0	
11	5764.83	48,780	-89	7	0	3	0	35	45	0	
12	5764.77	48,602	-178	7	0	3	0	80	90	0	
13	5764.74	48,514	-88	7	0	3	0	34	44	0	
14	5764.71	48,425	-89	7	0	3	0	35	45	0	
15	5764.68	48,336	-89	7	0	3	0	35	45	0	
16	5764.65	48,248	-88	7	0	3	0	34	44	0	
17	5764.62	48,159	-89	7	0	3	0	35	45	0	
18	5764.60	48,100	-59	7	0	3	0	20	30	0	
19	5764.61	48,130	30	7	0	3	0	1	11	26	
20	5764.60	48,100	-30	7	0	3	0	6	16	0	
21	5764.56	47,983	-117	7	0	3	0	49	59	0	
22	5764.53	47,895	-88	7	0	3	0	35	45	1	
23	5764.51	47,836	-59	7	0	3	0	20	30	0	
24	5764.47	47,719	-117	7	0	3	0	49	59	0	
25	5764.45	47,660	-59	7	0	3	0	20	30	0	
26	5764.42	47,572	-88	7	0	3	0	35	45	1	
27	5764.40	47,514	-58	7	0	3	0	19	29	0	
28	5764.37	47,426	-88	7	0	3	0	36	46	2	
29	5764.34	47,339	-87	7	0	3	0	36	46	2	
30	5764.32	47,280	-59	7	0	3	0	20	30	0	
31	5764.30	47,222	-58	7	0	3	0	20	30	1	
Total cfs-days				---	224	0	87	0	975	1,285	33
Total ac-ft				-2,484	443	0	173	0	1,933	2,549	65

Table 4. Lake Oroville

Daily Operation

(in acre-feet except as noted)

Capacity: 3,537,580 ac-ft

July 2004

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow					Inflow	
				Hyatt Powerplant Generation 1/	Palermo Canal	Evaporation 2/	Spill	Total Outflow	Hyatt Powerplant Pumpback	Computed Inflow 3/
Jun 30	846.18	2,757,436								
	1	845.38	2,746,857	-10,579	14,015	31	257	0	14,303	0
	2	844.14	2,730,515	-16,342	20,148	31	288	0	20,467	0
	3	842.92	2,714,503	-16,012	19,241	31	288	0	19,560	0
	4	841.72	2,698,818	-15,685	19,068	31	334	0	19,433	0
	5	840.57	2,683,846	-14,972	18,713	31	325	0	19,069	0
	6	839.41	2,668,796	-15,050	18,811	31	331	0	19,173	0
	7	837.94	2,649,805	-18,991	21,628	31	338	0	21,997	0
	8	836.27	2,628,344	-21,461	23,968	31	321	0	24,320	0
	9	834.57	2,606,622	-21,722	24,778	32	311	0	25,121	0
	10	833.10	2,587,940	-18,682	21,385	32	263	0	21,680	0
	11	831.39	2,566,326	-21,614	24,259	32	316	0	24,607	0
	12	829.96	2,548,348	-17,978	21,441	32	375	0	21,848	0
	13	828.59	2,531,207	-17,141	22,049	32	358	0	22,439	0
	14	826.99	2,511,292	-19,915	22,841	32	318	0	23,191	0
	15	825.39	2,491,487	-19,805	22,783	32	324	0	23,139	0
	16	824.23	2,477,196	-14,291	20,172	32	360	0	20,564	0
	17	823.21	2,464,679	-12,517	16,563	32	321	0	16,916	0
	18	821.83	2,447,813	-16,866	19,493	32	335	0	19,860	0
	19	820.46	2,431,151	-16,662	20,266	32	334	0	20,632	0
	20	819.26	2,416,627	-14,524	18,812	32	316	0	19,160	0
	21	818.15	2,403,250	-13,377	17,356	32	323	0	17,711	0
	22	817.21	2,391,962	-11,288	17,065	32	350	0	17,447	0
	23	816.01	2,377,604	-14,358	18,988	32	342	0	19,362	0
	24	814.95	2,364,972	-12,632	18,429	32	283	0	18,744	0
	25	813.63	2,349,306	-15,666	19,101	32	260	0	19,393	0
	26	812.57	2,336,778	-12,528	17,257	32	374	0	17,663	0
	27	811.29	2,321,712	-15,066	20,076	32	352	0	20,460	0
	28	810.16	2,308,467	-13,245	19,361	32	214	0	19,607	0
	29	808.88	2,293,528	-14,939	19,022	32	305	0	19,359	0
	30	807.54	2,277,961	-15,567	18,536	32	241	0	18,809	0
	31	806.44	2,265,237	-12,724	17,041	32	267	0	17,340	0
Total				-492,199	612,666	984	9,724	0	623,374	0
1/ Includes bypass flows										
2/ Evaporation will be zero for days when there is precipitation or heavy overcast.										
3/ Does not include pumpback.										

1/ Includes bypass flows

2/ Evaporation will be zero for days when there is precipitation or heavy overcast.

3/ Does not include pumpback.

**Table 5. Thermalito Forebay
Including Diversion Pool and Power Canal**

Capacity: 25,120 ac-ft

Daily Operation
(in acre-feet except as noted)

July 2004

Date	Storage 1/	Storage Change	Inflow			Outflow					Losses (-) And Gains (+)
			Lake Oroville Releases 2/	Kelly Ridge Generation	Thermalito Pumping- Generating Plant Pumpback	Thermalito Pumping- Generating Plant Generation 3/	Butte County 4/	Thermalito Irrigation District	Releases To River 5/	Hyatt Powerplant Pumpback	
Jun 30	23,740										
1	24,279	539	14,015	512	0	12,610	3	13	1,251	0	-111
2	23,797	-482	20,148	512	0	19,657	3	13	1,253	0	-216
3	23,578	-219	19,241	512	0	19,396	3	13	1,458	0	898
4	23,925	347	19,068	444	0	18,470	3	13	1,632	0	953
5	23,621	-304	18,713	512	0	18,295	3	13	1,622	0	404
6	23,579	-42	18,811	512	0	18,531	3	13	1,525	0	707
7	23,815	236	21,628	510	0	21,314	3	13	1,470	0	898
8	23,476	-339	23,968	510	0	23,240	3	13	1,456	0	-105
9	23,392	-84	24,778	442	0	23,690	3	13	1,323	0	-275
10	24,031	639	21,385	506	0	19,832	3	14	1,259	0	-144
11	23,488	-543	24,259	506	0	23,950	3	14	1,253	0	-88
12	23,815	327	21,441	506	0	20,155	3	14	1,410	0	-38
13	23,608	-207	22,049	506	0	21,017	3	14	1,571	0	-157
14	23,570	-38	22,841	424	0	21,496	3	14	1,664	0	-126
15	22,939	-631	22,783	421	0	22,112	3	14	1,668	0	-38
16	23,640	701	20,172	508	0	18,308	3	14	1,672	0	18
17	23,527	-113	16,563	510	0	15,430	3	14	1,676	0	-63
18	23,596	69	19,493	510	0	18,182	3	14	1,593	0	-142
19	23,440	-156	20,266	508	0	19,768	3	14	1,468	0	323
20	23,995	555	18,812	508	0	16,816	3	14	1,335	0	-597
21	24,066	71	17,356	454	0	16,709	3	14	1,390	0	377
22	24,141	75	17,065	498	0	16,689	3	14	1,487	0	705
23	23,825	-316	18,988	498	0	19,108	4	14	1,331	0	655
24	23,896	71	18,429	502	0	18,183	4	14	1,263	0	604
25	23,297	-599	19,101	506	0	19,165	4	14	1,271	0	248
26	23,432	135	17,257	381	0	16,929	4	14	1,269	0	713
27	22,055	-1,377	20,076	506	0	20,844	4	14	1,271	0	174
28	23,179	1,124	19,361	508	0	18,358	4	14	1,270	0	901
29	23,892	713	19,022	506	0	18,630	4	14	1,269	0	1,102
30	23,682	-210	18,536	484	0	18,665	4	14	1,271	0	724
31	23,478	-204	17,041	506	0	16,265	4	14	1,509	0	41
Total		-262	612,666	15,228	0	591,814	102	425	44,160	0	8,345

1/ Sum of Thermalito Forebay and Diversion Pool.

2/ Sum of releases from Lake Oroville through Hyatt plant, and spill.

3/ Includes Bypass flows at Thermalito.

4/ Includes 5 AF of entitlement water to Del Oro WD, 1 AF of recreation water to Lime Saddle Marina, and 96 AF to Cal Water.

5/ The sum of the flows from fish barrier dam and the fish hatchery.

Table 6. Thermalito Afterbay

Daily Operation

(in acre-feet except as noted)

Capacity: 57,040 ac-ft

July 2004

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow	Outflow						Losses (-) and Gains (+)	Total Releases to River 2/	
				Thermalito Pumping-Generating Plant Generation 1/	Sutter Butte Canal	Western Canal Lateral	Richvale Canal	Western Canal	Afterbay River Outlet	Thermalito Pumping-Generating Plant Pumpback			
Jun 30	130.75	34,690											
	1	129.50	30,510	-4,180	12,610	3,312	29	899	1,977	10,731	0	158	11,982
	2	130.17	32,719	2,209	19,657	3,293	29	901	1,977	11,326	0	78	12,579
	3	130.15	32,652	-67	19,396	3,233	29	880	1,977	12,595	0	-749	14,053
	4	129.82	31,556	-1,096	18,470	3,192	29	880	1,977	12,337	0	-1,151	13,969
	5	129.59	30,802	-754	18,295	3,192	29	880	1,977	12,337	0	-634	13,959
	6	129.39	30,154	-648	18,531	3,192	30	880	1,977	12,496	0	-604	14,021
	7	129.48	30,445	291	21,314	3,192	30	880	1,977	14,043	0	-901	15,513
	8	130.30	33,156	2,711	23,240	3,212	30	880	1,977	14,519	0	89	15,975
	9	131.19	36,221	3,065	23,690	3,212	28	880	1,947	14,678	0	120	16,001
	10	130.93	35,312	-909	19,832	3,212	28	880	1,917	14,737	0	33	15,996
	11	131.73	38,142	2,830	23,950	3,212	28	880	1,918	14,737	0	-345	15,990
	12	131.62	37,747	-395	20,155	3,253	28	881	1,936	14,618	0	166	16,028
	13	131.74	38,178	431	21,017	3,273	28	881	1,958	14,440	0	-6	16,011
	14	131.99	39,083	905	21,496	3,310	28	881	1,958	14,341	0	-73	16,005
	15	132.38	40,516	1,433	22,112	3,310	28	881	1,958	14,321	0	-181	15,989
	16	131.72	38,106	-2,410	18,308	3,330	28	879	1,958	14,321	0	-202	15,993
	17	130.24	32,954	-5,152	15,430	3,330	28	879	1,956	14,321	0	-68	15,997
	18	129.45	30,348	-2,606	18,182	3,293	28	881	1,958	14,400	0	-228	15,993
	19	129.21	29,577	-771	19,768	3,253	28	881	1,942	14,499	0	64	15,967
	20	128.38	26,981	-2,596	16,816	3,271	28	881	1,910	13,091	0	-231	14,426
	21	127.88	25,472	-1,509	16,709	3,271	28	865	1,898	11,643	0	-513	13,033
	22	127.31	23,803	-1,669	16,689	3,273	28	861	1,898	11,524	0	-774	13,011
	23	127.48	24,295	492	19,108	3,233	28	861	1,898	11,683	0	-913	13,014
	24	127.39	24,034	-261	18,183	3,233	28	861	1,896	11,762	0	-664	13,025
	25	127.79	25,205	1,171	19,165	3,213	30	861	1,898	11,742	0	-250	13,013
	26	127.17	23,401	-1,804	16,929	3,233	30	861	1,910	11,742	0	-957	13,011
	27	128.19	26,403	3,002	20,844	3,233	30	861	1,918	11,742	0	-58	13,013
	28	128.06	26,011	-392	18,358	3,213	32	861	1,918	11,722	0	-1,004	12,992
	29	127.99	25,801	-210	18,630	3,193	32	861	1,918	11,742	0	-1,094	13,011
	30	128.03	25,921	120	18,665	3,154	32	861	1,908	11,742	0	-848	13,013
	31	127.62	24,704	-1,217	16,265	3,174	32	861	1,888	11,564	0	37	13,073
Total				-9,986	591,814	100,500	901	27,120	60,080	401,496	0	-11,703	445,656

1/ Includes Bypass flows at Thermalito.

2/ The sum of the flows from the fish barrier dam, fish hatchery, and afterbay river outlet.

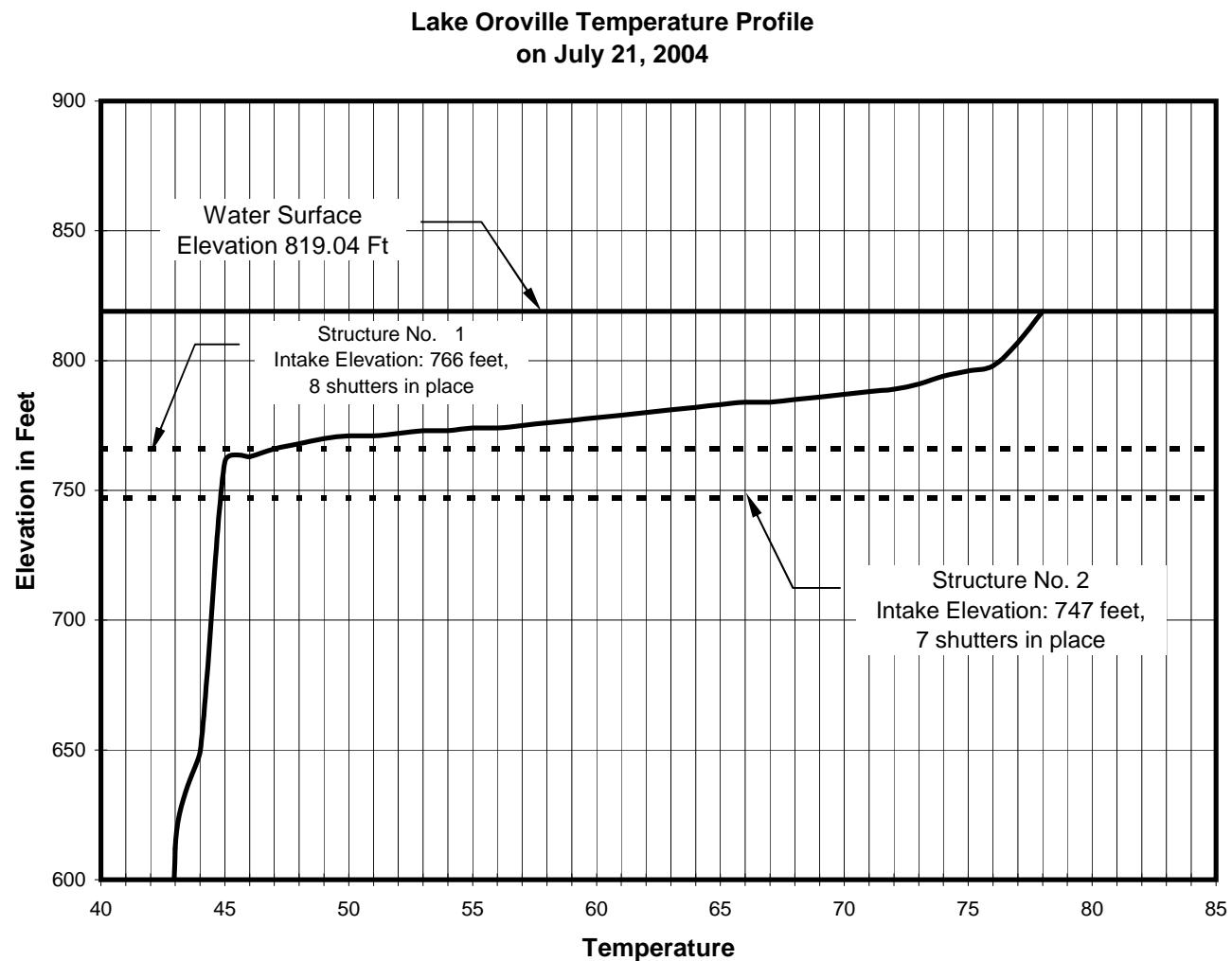
Table 7. Oroville-Thermalito Complex

Water Temperature Data

(in degrees Fahrenheit)

July 2004

Date	Mean Daily Temperature	
	Thermalito Afterbay Outlet	Fish Hatchery
1	65	59
2	65	59
3	65	60
4	65	59
5	65	57
6	65	59
7	64	58
8	63	59
9	62	59
10	62	59
11	63	60
12	63	61
13	63	60
14	64	58
15	64	57
16	63	57
17	62	57
18	63	56
19	63	59
20	63	59
21	64	59
22	65	58
23	64	56
24	63	57
25	62	57
26	62	58
27	62	59
28	63	60
29	63	60
30	64	60
31	64	60



Note: Water surface elevations on Table 4 are taken at Oroville Dam at midnight and may differ slightly from those shown on this table which are normally taken at mid-day and upstream from Oroville Dam.

Table 8. North Bay Aqueduct
Delta Field Division, Monthly Deliveries

(In acre-feet)

July 2004

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries				
	Beginning and Ending					Table A Amount		Permit		
	No.	Structure	Mile			M & I	Benicia			
1	1	Barker Slough Pumping Plant	0.17	(Into the North Bay Aqueduct)	6,861	109	320	300		
		Travis Surge Tank	8.78							
			8.80	Solano County Water Agency Travis Turnout	409					
			10.54	Solano County Water Agency Fairfield / Vacaville 24"	320					
				Solano County Water Agency Fairfield / Vacaville 42"	2,370					
			17.00	Solano County Water Agency Central Solano	Stub					
2	3A	Cordelia Forebay	21.23			1/ 324	1,347	1,100		
		Cordelia Pumping Plant & Cordelia Spillway	21.30		3,536					
3B	2	Napa Pipeline	21.33	Solano County Water Agency Vallejo	1,424	14	540	2/ 200		
				Solano County Water Agency Benicia	1,347					
		Cordelia Surge Tank	23.33							
		Creston Surge Tank Connection	25.65							
			26.95	Napa County Flood Control & WCD American Canyon 2	14					
			27.27	Napa County Flood Control & WCD American Canyon 3	0					
		Napa Terminal Tank	27.58	City of Napa	540					
			27.60	Napa County Flood Control & WCD American Canyon 1	211					

1/ Includes 27 AF of Napa Co. FC&WCD Table A water through Saloano Co.'s turnout in Reach 3A for delivery to American Canyon.

2/ Vallejo Permit water sold to American Canyon, Delivered to Cordelia Forebay and pumped to American Canyon via Reach 3B.

Table 9. Delta Field Division Plant Data

(in acre-feet)

July 2004

Date	North Bay Aqueduct		California Aqueduct		South Bay Aqueduct			
	Barker Slough Pumping Plant	Cordelia Pumping Plant	Banks Pumping Plant		South Bay Pumping Plant	Del Valle Pumping Plant		
			Total	SWP		Into Lake	Into Aqueduct	Gravity Flow Through Plant Into Aqueduct
1	202	101	5,439	5,439	395	0	0	0
2	217	113	6,697	6,697	386	0	0	0
3	221	117	7,751	7,751	386	0	0	0
4	206	99	7,716	7,716	386	0	0	0
5	213	108	8,700	8,700	386	0	0	0
6	230	119	9,642	9,642	386	0	0	0
7	227	124	11,370	11,370	402	0	0	5
8	212	109	12,533	12,533	252	0	0	148
9	225	121	12,874	12,874	184	0	0	197
10	219	118	13,463	13,463	499	0	0	130
11	213	104	13,748	13,748	536	0	0	18
12	214	109	13,647	13,647	547	0	0	0
13	224	114	13,870	13,870	451	0	0	0
14	217	111	13,934	12,924	461	0	0	0
15	219	112	13,925	12,915	489	0	0	18
16	234	121	13,925	12,915	535	0	0	4
17	217	107	13,898	12,888	525	0	0	0
18	214	107	13,990	12,980	531	0	0	0
19	217	109	13,869	12,859	548	0	0	0
20	209	99	14,171	13,161	544	0	0	0
21	233	118	13,844	11,874	510	0	0	0
22	239	123	13,773	11,803	513	0	0	0
23	245	132	13,265	11,295	502	0	0	0
24	225	117	13,785	11,815	503	0	0	0
25	214	110	13,766	11,796	505	0	0	0
26	218	108	14,099	12,129	514	0	0	0
27	218	113	13,782	11,812	519	0	0	26
28	232	124	12,767	10,797	505	0	0	37
29	238	128	12,982	11,012	505	0	0	39
30	235	128	11,772	8,792	490	0	0	33
31	214	113	12,727	9,747	445	0	0	33
Total	6,861	3,536	381,724	350,964	14,340	0	0	688

Table 10. Clifton Court Forebay

Daily Operation of Gates

July 2004

Date	Time								Amount of inflow in Acre-Feet
	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed	
1	0:01	3:15	5:45	7:34	10:25	12:30	15:53	17:23	5,897
2	0:01	4:00	6:45	11:58					7,918
3	0:01	5:00	7:30	10:50					7,923
4	0:01	6:00	8:36	10:53					7,930
5	0:01	7:45	9:21	10:57					8,893
6	0:01	8:00	10:15	14:10	20:00	21:25			10,891
7	0:01	4:30	6:00	9:00	11:15	14:35	20:15	23:40	11,887
8	0:01	4:45	5:45	10:15	12:55	16:00	21:00	---	12,882
9	---	5:15	13:45	23:00					11,579
10	2:30	8:00	11:45	23:45					14,201
11	3:00	9:45	12:45	---					14,228
12	---	0:45	3:45	10:30	13:30	---			14,226
13	---	1:45	4:30	14:20	20:00	---			14,220
14	---	2:30	5:00	11:30	15:00	---			14,185
15	---	3:30	5:45	10:00	15:30	---			14,221
16	---	4:00	6:30	11:00	16:00	---			14,231
17	---	4:45	7:00	13:00	16:45	---			14,188
18	---	5:30	7:45	12:25	17:47	---			13,871
19	---	6:00	8:15	13:00	18:30	---			13,784
20	---	6:45	8:45	12:33	18:45	---			13,892
21	---	9:45	11:30	13:55	19:01	23:45			13,104
22	1:16	10:30	12:00	14:00	19:30	23:33			14,176
23	2:01	11:30	13:00	15:00	20:00	---			13,863
24	---	1:00	2:30	12:45	14:15	16:30	20:45	---	13,175
25	---	1:30	3:00	7:30	10:30	14:15	19:15	---	14,167
26	---	2:15	3:45	8:00	11:30	16:00	17:45	---	14,242
27	---	3:00	4:45	9:15	12:30	17:30	19:15	---	14,232
28	---	4:00	5:30	10:00	14:00	18:45	20:15	---	13,239
29	---	5:00	6:35	10:15	15:51	19:30	21:15	---	13,244
30	---	5:45	7:30	12:15	16:34	20:15	22:00	---	11,882
31	---	6:45	8:15	12:25	17:11	21:00	22:30	---	12,870
Total inflow for the month in AF:									389,241

Table 11. Governor Edmund G. Brown California Aqueduct
 Delta Field Division, Monthly Deliveries

(In acre-feet)

July 2004

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	USBR	Local	Loan Water	Dry Year Purchase		
	No.	Structure	Mile									
1	Banks Pumping Plant	3.32			381,724	49	111	141	591	175		
2A	South Bay Pumping Plant	4.49	Bethany Reservoir Inlet		14,340							
	Check No. 1	5.95										
	2	Check No. 2	12.01									
	3	12.47	Musco Olive		49							
		Check No. 3	18.29									
	4	22.16	Tracy Golf & Country Club		0							
		Check No. 4	23.99									
	5	Check No. 5	29.73									
	6	Check No. 6	34.24									
	7	35.22	Turlock Fruit Company Inflow		0							
		Check No. 7	39.91									
2B	8	42.46	Oak Flat Water District-A		111	111	0	0	0	0		
		42.9	Western Hills WD		141							
		43.81	Oak Flat Water District-B		591							
		44.64	Oak Flat Water District-C		175							
		Check No. 8	45.97									
	9	46.18	Oak Flat Water District-D		292	292	1,169	0	0	0		
			Oak Flat Totals:		1,169							
	Check No. 9	51.3				11	11	0	0	0		
	10	Check No. 10	56.86									
	11	Check No. 11	61.4									
	12		66.14	Veteran's Cemetery	11							
		Check No. 12	66.71		357,784							

Table 12. South Bay Aqueduct
Delta Field Division, Monthly Deliveries

(In acre-feet)

July 2004

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	Purchase Pool A	Purchase Pool B	Local	Recreation		
	No.	Structure	Mile									
1	1	South Bay Pumping Plant	0.00	(into South Bay Aqueduct)	14,340	3	5	1,587				
			3.17	Granite - Vasco Rd. (Temp.)	0							
			3.18	Oakland Scavenger Zone 7	3							
		Check No. 1	3.91									
2	2	Check No. 2	5.21			5	0	1,587				
			7.21	Zone 7 Altamont	5							
		Check No. 3	9.49	Zone 7 Patterson Inflow Exchange	0							
4	4			Zone 7 Patterson Project Water	1,587	232	8	38	622	81		
		Check No. 4	10.68									
		Check No. 5	12.29									
			13.55	Zone 7 Wente #1	232							
			14.16	Zone 7 Wente #2	8							
			14.31	Ising Project Water	38							
		Check No. 6	14.65									
			14.78	Zone 7 Arroyo Mocho Project Water	622							
		Check No. 7	16.38									
			16.63	Zone 7 Wente #4	81							
5	5		16.69	Zone 7 Norman Nursery	13	491	0	24	104	2,720	192	
			16.70	Zone 7 Concannon Project Water	56							
		Del Valle Branch Pipeline Junction	18.63	(Pumped into Lake Del Valle)	0							
				(Flow into South Bay Aqueduct)	688							
				Arroyo Valle #1 & #2 Project Water	491							
				Arroyo Valle #1 & #2 Inflow Exchange	0							
				Lake Del Valle Recreation	24							
				Zone 7 Wente #5	104							
			19.20	So. Livermore Project	2,720							
				So. Livermore Inflow Released	0							
6	6			So. Livermore Stored Exchanged	0	837	0	0	0	0	0	
			19.21	Zone 7 - Kalthof Detjens	192							
				ACWD Vallecitos Project Water	837							
7	7	La Costa Tunnel	22.50	City of San Francisco		1,968	0	0	0	0	0	
			25.97	San Antonio	0							
8	8	Mission Tunnel	28.97	ACWD - Bayside 1 & 2 Project Water:	1,968	6,061	0	0	0	0	0	
				Inflow Released	0							
9	9	Santa Clara Pipeline	35.86	Inflow Exchange:	0	6,061	0	0	0	0	0	
				S.C.V.W.D. Meter	6,061							

Table 13. Lake Del Valle

Daily Operation

Capacity: 77,106 ac-ft

July 2004

Date	Water Surface Elevation (feet)	Storage	Storage Change	Inflow		Outflow					Precipitation (inches)
				Natural 1/	From South Bay Aqueduct	Arroyo Valle	South Bay Aqueduct	Recreation Deliveries 2/	Evaporation	Total Outflow	
Jun 30	702.99	39,907									
1	702.96	39,886	-21	-8	0	0	0	0	13	13	0.00
2	702.95	39,879	-7	3	0	0	0	0	10	10	0.00
3	702.92	39,858	-21	-12	0	0	0	0	9	9	0.00
4	702.90	39,844	-14	-2	0	0	0	0	12	12	0.00
5	702.89	39,837	-7	6	0	0	0	0	13	13	0.00
6	702.87	39,822	-15	-1	0	0	0	0	14	14	0.00
7	702.84	39,801	-21	2	0	0	5	0	18	23	0.00
8	702.60	39,632	-169	-6	0	0	148	1	14	163	0.00
9	702.27	39,400	-232	-22	0	0	197	1	12	210	0.00
10	702.08	39,267	-133	11	0	0	130	1	13	144	0.00
11	702.02	39,225	-42	-9	0	0	18	1	14	33	0.00
12	702.00	39,211	-14	1	0	0	0	1	14	15	0.00
13	701.97	39,190	-21	-6	0	0	0	1	14	15	0.00
14	701.95	39,176	-14	2	0	0	0	1	15	16	0.00
15	701.90	39,141	-35	-1	0	0	18	1	15	34	0.00
16	701.86	39,113	-28	-8	0	0	4	1	15	20	0.00
17	701.83	39,092	-21	-3	0	0	0	1	17	18	0.00
18	701.81	39,078	-14	3	0	0	0	1	16	17	0.00
19	701.76	39,043	-35	-18	0	0	0	1	16	17	0.00
20	701.76	39,043	0	16	0	0	0	1	15	16	0.00
21	701.72	39,015	-28	-13	0	0	0	1	14	15	0.00
22	701.71	39,008	-7	9	0	0	0	1	15	16	0.00
23	701.68	38,987	-21	-6	0	0	0	1	14	15	0.00
24	701.66	38,973	-14	0	0	0	0	1	13	14	0.00
25	701.64	38,960	-13	2	0	0	0	1	14	15	0.00
26	701.62	38,946	-14	1	0	0	0	1	14	15	0.00
27	701.57	38,911	-35	6	0	0	26	1	14	41	0.00
28	701.49	38,855	-56	-4	0	0	37	1	14	52	0.00
29	701.42	38,806	-49	6	0	0	39	1	15	55	0.00
30	701.35	38,758	-48	1	0	0	33	1	15	49	0.00
31	701.29	38,716	-42	4	0	0	33	1	12	46	0.00
Total				-1,191	-46	0	0	688	24	433	1,145
1/ Total inflow from stream gaging station above Lang Canyon and accretions/depletions.											
2/ To East Bay Regional Park District.											
NR=No Records											

Table 14. Consolidated State-Federal O'Neill Forebay

Daily Operations

July 2004

United States
Department of the Interior
Bureau of Reclamation
Central Valley Project

State of California
The Resources Agency
Department of Water Resources
State Water Project

Capacity 56,430 ac-ft

Date	Water Surface Elevation (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)				Outflow (cfs)				Computed Losses (-) Gains (+) (cfs)
				Pump In 1/	O'Neill Pumping Generating Plant (Pumped)	Gianelli Pumping Generating Plant (Generation)	California Aqueduct	O'Neill Pumping Generating Plant (Generation)	Gianelli Pumping Generating Plant (Pumped)	Dos Amigos Pumping Plant	Deliveries 2/	
Jun 30	219.00	40,584										
1	219.10	40,839	255	0	0	8,035	2,186	0	0	10,208	32	148
2	219.05	40,711	-128	0	115	7,244	2,949	0	0	10,557	32	216
3	219.12	40,889	178	0	360	6,501	3,583	0	0	10,270	32	-52
4	219.07	40,762	-127	0	472	6,076	3,558	0	0	10,303	32	165
5	220.10	43,411	2,649	0	427	5,519	3,838	0	0	8,409	32	-7
6	219.45	41,733	-1,678	0	140	4,284	4,665	288	0	9,482	32	-133
7	219.46	41,759	26	0	0	5,279	4,994	186	0	9,781	34	-259
8	220.44	44,296	2,537	0	0	5,107	6,086	181	0	9,759	22	48
9	220.10	43,411	-885	0	0	3,510	6,240	11	194	10,002	22	33
10	221.45	46,941	3,530	0	199	5,922	6,547	0	779	10,133	22	46
11	218.49	39,297	-7,644	0	381	0	6,592	0	1,557	9,666	22	418
12	220.45	44,322	5,025	0	658	4,322	6,351	0	0	8,707	22	-69
13	221.99	48,360	4,038	0	450	4,459	6,783	0	952	8,762	22	80
14	221.88	48,071	-289	0	190	1,987	6,686	0	0	9,015	26	32
15	221.16	46,180	-1,891	0	40	2,319	6,496	86	0	9,581	22	-119
16	220.62	44,766	-1,414	0	0	2,650	6,518	145	0	9,696	22	-18
17	220.53	44,531	-235	0	0	2,641	6,840	120	0	9,427	22	-30
18	219.25	41,221	-3,310	0	228	1,987	6,511	0	652	9,683	22	-38
19	220.73	45,054	3,833	0	471	4,094	6,441	0	0	9,050	22	-2
20	222.54	49,820	4,766	0	487	4,056	6,779	0	0	8,745	22	-152
21	221.76	47,756	-2,064	0	338	1,430	6,684	0	0	9,429	23	-41
22	221.66	47,493	-263	0	299	2,132	6,401	0	0	8,770	26	-169
23	222.50	49,713	2,220	0	291	3,552	6,504	0	0	9,203	26	1
24	221.70	47,598	-2,115	0	386	1,384	6,463	0	0	9,198	26	-75
25	220.66	44,870	-2,728	0	646	0	6,814	0	0	8,926	26	117
26	221.60	47,336	2,466	0	730	2,616	6,263	0	0	8,405	26	65
27	221.40	46,810	-526	0	506	834	6,636	0	0	8,454	26	239
28	219.44	41,708	-5,102	0	358	0	6,355	44	0	9,300	30	89
29	218.74	39,926	-1,782	0	143	2,328	6,217	77	0	9,426	76	-7
30	219.48	41,810	1,884	0	244	4,296	5,505	0	0	8,959	76	-60
31	220.93	45,577	3,767	0	357	4,104	5,893	0	0	8,295	77	-83
Total			4,993	0	8,916	108,668	180,378	1,138	4,134	289,601	954	382
Mean cfs			---	0	288	3,505	5,819	37	133	9,342	31	12
Acre-feet			4,993		17,688	215,545	357,784	2,257	8,199	574,427	1,893	752

1/ Pump-in located at Mile 79.67R.

2/ Includes 79 AF delivered to DFG at O'Neill Forebay, 22 AF to Parks and Recreation, 0 AF to the Cattle Program, and 1,792 AF to SLWD.

Table 15. Consolidated State-Federal San Luis Reservoir

Daily Operations

July 2004

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

State of California

The Resources Agency

Department of Water Resources

State Water Project

Capacity: 2,027,835 ac-ft

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)	Outflow (cfs)			Computed Losses (-) Gains (+) (cfs)
				Gianelli Pumping Generating Plant (Pumped)	Gianelli Pumping Generating Plant (Generation)	Pacheco Tunnel 1/	Parks and Rec. Del.	
Jun 30	423.28	719,890						
1	421.43	703,386	-16,504	0	8,035	389	0	103
2	419.78	688,787	-14,599	0	7,244	390	0	274
3	418.23	675,177	-13,610	0	6,501	393	0	32
4	416.80	662,712	-12,465	0	6,076	389	0	181
5	415.58	652,146	-10,566	0	5,519	363	0	555
6	414.52	643,017	-9,129	0	4,284	381	0	63
7	413.24	632,059	-10,958	0	5,279	387	0	141
8	411.97	621,255	-10,804	0	5,107	396	0	56
9	411.08	613,726	-7,529	194	3,510	387	0	-93
10	409.83	603,209	-10,517	779	5,922	388	0	229
11	410.05	605,055	1,846	1,557	0	246	0	-380
12	409.05	596,681	-8,374	0	4,322	336	0	436
13	408.08	588,601	-8,080	952	4,459	322	0	-245
14	407.57	584,368	-4,233	0	1,987	361	0	214
15	406.92	578,991	-5,377	0	2,319	371	0	-21
16	406.21	573,139	-5,852	0	2,650	351	0	51
17	405.48	567,145	-5,994	0	2,641	355	0	-26
18	405.06	563,707	-3,438	652	1,987	325	0	-73
19	403.98	554,902	-8,805	0	4,094	347	0	2
20	402.89	546,068	-8,834	0	4,056	338	0	-60
21	402.46	542,598	-3,470	0	1,430	334	0	15
22	401.83	537,529	-5,069	0	2,132	174	0	-250
23	400.86	529,758	-7,771	0	3,552	359	0	-7
24	400.41	526,168	-3,590	0	1,384	419	0	-7
25	400.33	525,531	-637	0	0	369	0	48
26	399.58	519,569	-5,962	0	2,616	350	0	-40
27	399.25	516,954	-2,615	0	834	270	0	-214
28	399.13	516,005	-949	0	0	95	0	-383
29	398.50	511,030	-4,975	0	2,328	345	0	165
30	397.33	501,838	-9,192	0	4,296	340	0	2
31	396.18	492,864	-8,974	0	4,104	558	2	140
Total			-227,026	4,134	108,668	10,828	2	908
Mean cfs			---	133	3,505	349	0	29
Acre-feet			-227,026	8,199	215,545	21,480	2	1,802

1/ Pacheco Tunnel, San Felipe Split; Santa Clara: 16,976 AF, San Benito: 4,504 AF.

Table 16. San Luis Field Division Plant Data

(in acre-feet)

July 2004

Date	Dos Amigos Pumping Plant		Gianelli Pumping - Generating Plant				San Felipe Project
	Total Pumping	SWP Pumping 1/ 2/	Total Generation	SWP Generation 1/ 2/	Total Pumping	SWP Pumping 1/ 2/	Federal
1	20,248	12,514	15,937	9,273	0	0	772
2	20,940	13,390	14,369	7,658	0	0	773
3	20,370	12,792	12,894	5,983	0	0	780
4	20,436	12,793	12,051	4,668	0	0	771
5	16,679	9,058	10,946	2,236	0	0	721
6	18,808	11,289	8,497	1,734	0	0	756
7	19,401	12,104	10,471	1,993	0	0	767
8	19,356	11,971	10,129	1,816	0	0	786
9	19,839	12,349	6,962	-170	385	385	768
10	20,099	12,541	11,747	-1,050	1,545	1,545	770
11	19,172	11,612	0	0	3,088	3,088	487
12	17,270	9,676	8,573	114	0	0	666
13	17,379	9,810	8,845	92	1,888	1,888	639
14	17,882	11,866	3,942	-99	0	0	716
15	19,004	12,959	4,599	618	0	0	736
16	19,233	13,188	5,256	-119	0	0	696
17	18,699	12,648	5,239	-41	0	0	704
18	19,207	13,226	3,942	-32	1,293	1,293	645
19	17,950	11,867	8,120	2,082	0	0	689
20	17,346	12,229	8,046	3,940	0	0	671
21	18,702	13,574	2,836	1,386	0	0	662
22	17,395	12,348	4,229	2,255	0	0	346
23	18,255	13,172	7,046	4,137	0	0	712
24	18,244	13,203	2,745	-192	0	0	831
25	17,704	13,677	0	0	0	0	732
26	16,671	12,587	5,189	2,335	0	0	694
27	16,769	12,596	1,655	1,655	0	0	536
28	18,447	14,439	0	0	0	0	189
29	18,697	14,735	4,617	4,617	0	0	684
30	17,771	13,754	8,522	8,522	0	0	675
31	16,454	12,452	8,141	8,141	0	0	1,106
Total	574,427	386,419	215,545	73,552	8,199	8,199	21,480

1/ Negative values may appear in SWP columns and indicate a mismatch of scheduled CVP energy and actual pumping; adjustments to SWP water shares are made to balance the mismatch.

2/ Provisional, subject to change.

Table 17. Consolidated State-Federal Los Banos Reservoir

Daily Operations
July 2004

United States
Department of the Interior
Bureau of Reclamation
Central Valley Project

Capacity 34,560 ac-ft

State of California
The Resources Agency
Department of Water Resources
State Water Project

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Estimated Inflow (cfs)	Estimated Outflow (cfs)		Computed Losses (-) Gains (+) (ac-ft)
					Spill	Outlet	
Jun 30	325.92	19,703					
1	325.90	19,694	-9	0	0	0	-9
2	325.89	19,689	-5	0	0	0	-5
3	325.86	19,676	-13	0	0	0	-13
4	325.85	19,671	-5	0	0	0	-5
5	325.83	19,662	-9	0	0	0	-9
6	325.80	19,648	-14	0	0	0	-14
7	325.76	19,630	-18	0	0	0	-18
8	325.74	19,621	-9	0	0	0	-9
9	325.71	19,607	-14	0	0	0	-14
10	325.69	19,598	-9	0	0	0	-9
11	325.67	19,589	-9	0	0	0	-9
12	325.64	19,575	-14	0	0	0	-14
13	325.62	19,566	-9	0	0	0	-9
14	325.59	19,552	-14	0	0	0	-14
15	325.57	19,543	-9	0	0	0	-9
16	325.54	19,529	-14	0	0	0	-14
17	325.51	19,516	-13	0	0	0	-13
18	325.48	19,502	-14	0	0	0	-14
19	325.45	19,488	-14	0	0	0	-14
20	325.43	19,479	-9	0	0	0	-9
21	325.41	19,470	-9	0	0	0	-9
22	325.38	19,456	-14	0	0	0	-14
23	325.34	19,438	-18	0	0	0	-18
24	325.31	19,425	-13	0	0	0	-13
25	325.30	19,420	-5	0	0	0	-5
26	325.28	19,411	-9	0	0	0	-9
27	325.25	19,397	-14	0	0	0	-14
28	325.20	19,374	-23	0	0	0	-23
29	325.17	19,361	-13	0	0	0	-13
30	325.14	19,347	-14	0	0	0	-14
31	325.11	19,334	-13	0	0	0	-13
Total			-369	0	0	0	-369
Mean cfs			---	0	0	0	---
Acre-feet			-369	0	0	0	-369

Table 18. Consolidated State-Federal Little Panoche Reservoir

Daily Operations

July 2004

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

State of California

The Resources Agency

Department of Water Resources

State Water Project

Capacity: 5,580 ac-ft

Date	Water Surface Elev. (in feet)	Storage (ac-ft) 1/	Storage Change (ac-ft) 1/	Estimated Inflow (cfs)	Estimated Outflow (cfs)		Computed Losses (-) Gains (+) (ac-ft) 1/
					Spill	Outlet	
Jun 30	601.15	744					
1	601.00	736	-8	0	0	0	
2	Not Observed			0	0	0	
3	601.00	736		0	0	0	
4	601.00	736		0	0	0	
5	600.95	733	-3	0	0	0	
6	Not Observed			0	0	0	
7	600.95	733		0	0	0	
8	600.93	732	-1	0	0	0	
9	600.80	725	-7	0	0	0	
10	Not Observed			0	0	0	
11	600.75	723	-2	0	0	0	
12	600.70	720	-3	0	0	0	
13	600.70	720		0	0	0	
14	600.65	717	-3	0	0	0	
15	Not Observed			0	0	0	
16	600.60	715	-2	0	0	0	
17	Not Observed			0	0	0	
18	600.60	715		0	0	0	
19	600.58	714	-1	0	0	0	
20	600.55	712	-2	0	0	0	
21	600.50	710	-2	0	0	0	
22	600.50	710		0	0	0	
23	600.45	707	-3	0	0	0	
24	600.40	704	-3	0	0	0	
25	Not Observed			0	0	0	
26	Not Observed			0	0	0	
27	600.35	702	-2	0	0	0	
28	600.35	702		0	0	0	
29	600.30	699	-3	0	0	0	
30	600.30	699		0	0	0	
31	600.25	699		0	0	0	
Total			-45	0	0	0	-45
Mean cfs			---	0	0	0	---
Acre-feet			-45	0	0	0	-45

1/ Not available on a daily basis

Table 19a. Governor Edmund G. Brown California Aqueduct
 San Luis Field Division, Monthly Deliveries

(In acre-feet)

July 2004

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
	Beginning and Ending					USBR	Transfer	DWR Recreation	USBR Recreation		
	No.	Structure	Mile								
2B	12	Check No. 12	66.71		357,784						
3A		San Luis Reservoir		Department of Parks and Recreation	2	16,976	4,504	1	1		
				San Felipe Division Santa Clara Water District	16,976						
				San Felipe Division San Benito Water District	4,504						
3	13	O'Neill Forebay	70.85	Department of Parks and Recreation	22	1,792	43	12	10		
				Cattle Program	0						
				Department of Fish & Game	79						
		70.91 Thru 85.08		San Luis Water District	1,792	1,792	0	0	0		
				(Floodwater Inflow)	0						
				Reach 3 Subtotal:	1,893	1,792	0	55	46		
		Dos Amigos Pumping Plant	86.73		574,427						
4	14		89.03 Thru 94.06	San Luis Water District	11,364	11,364	2,993	44	196		
			89.66 Thru 89.67	Pacheco Water District	2,993						
			89.68	Panoche Water District	44						
			89.70	City of Dos Palos	196						
			Check No. 14	95.06							
		15	98.15 Thru 104.20	San Luis Water District	967	967	11,614	2	22,668		
			96.15 Thru 102.64	Panoche Water District (Floodwater Inflow)	11,614 0						
			102.64	Broadview Water District	2						
			105.22 Thru 108.64	Westlands Water District	22,668						
			Check No. 15	108.50							
			San Felipe Division Total:	21,480	21,480	0	0	0	0		
			Pacheco Water District Total:	2,993	2,993	0	0	0	0		
			Broadview Water District Total:	2	2	0	0	0	0		
			City of Dos Palos Total:	196	196	0	0	0	0		
			SLWD Reach 4 Subtotal:	14,123	14,123	0	0	0	0		
			Panoche Water District Total:	11,658	11,658	0	0	0	0		
			SLWD Total:	14,123	14,123	0	0	0	0		
			Westlands WD Reach 4 Subtotal:	22,668	22,668	0	0	0	0		

Table 19b. Governor Edmund G. Brown California Aqueduct
San Luis Field Division, Monthly Deliveries (Continued)

(In acre-feet)

July 2004

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
	Beginning and Ending					USBR	Transfer	DWR Recreation	USBR Recreation		
	No.	Structure	Mile								
5	16		110.52	(Reverse flow, Kings River)	0	29,718		1	0		
			Thru	Westlands Water District	29,718						
			122.05	Department of Fish and Game	1						
		Check No. 16	122.07								
	17		124.18	Westlands Water District	21,326	21,326					
			132.74								
		Check No. 17	132.95								
	18		133.81	Westlands Water District	22,507	22,507					
			Thru								
			142.61								
		Pleasant Valley Pumping Plant	143.16	Westlands Water District	14,062						
			143.16	City of Coalinga	1,146						
		Check No. 18	143.23								
6	19			Westlands WD Reach 5 Subtotal:	87,613	87,613	0	0	0		
			145.26	Westlands Water District	32,651	32,651	1/ 435				
			Thru								
			151.19								
				Lemoore Naval Air Station	435						
		Check No. 19	155.64	City of Huron (P&R)	6						
7	20			Westlands WD Reach 6 Subtotal:	32,651	32,651	0	0	0		
			156.34	City of Huron	135	135					
			156.40	Westlands Water District	14,999		14,999				
			Thru								
			163.69								
		Check No. 20	164.69								
	21		164.79	City of Avenal	303	303					
			167.04	Westlands Water District	6,814		6,814				
			Thru								
			171.67								
		Check No. 21	172.40		384,530						
				Reach 7 Total:	22,251	22,251	0	0	0		
				Westlands WD Total:	164,745	164,745	0	0	0		
				City of Coalinga Total:	1,146	1,146	0	0	0		
				City of Huron Total:	141	141	0	0	0		
				City of Avenal Total:	303	303	0	0	0		
				Total San Luis Field Division Deliveries:	217,326	216,787	435	57	47		

1/ Westlands Water District transferred 435 AF from County of Kings to Lemoore N.A.S.

Table 20. Consolidated State-Federal San Luis Canal 1/

Daily Operations

July 2004

United States
Department of the Interior
Bureau of Reclamation
Central Valley Project

State of California
The Resources Agency
Department of Water Resources
State Water Project

Date	Storage In Canal (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)		Outflow (cfs)			Computed Losses (-) Gains (+) (cfs)
			Non- Project	Dos Amigos Pumping Plant	San Luis Water District 2/	Panoche Water District	Westlands Water District 3/	
Jun 30	28,905							
1	28,783	-122	0	10,208	278	199	3,177	6,321
2	29,779	996	0	10,557	278	199	3,177	6,267
3	29,545	-234	0	10,270	278	199	3,177	6,941
4	30,297	752	0	10,303	278	199	3,177	6,793
5	29,874	-423	0	8,409	278	199	3,177	5,507
6	29,967	93	0	9,482	278	199	3,177	6,017
7	29,557	-410	0	9,781	278	199	3,185	6,780
8	29,676	119	0	9,759	256	201	2,823	6,323
9	29,555	-121	0	10,002	256	201	2,823	6,698
10	30,082	527	0	10,133	256	201	2,823	6,728
11	30,005	-77	0	9,666	256	201	2,823	6,853
12	30,254	249	0	8,707	256	201	2,823	5,628
13	29,872	-382	0	8,762	256	201	2,823	5,813
14	29,437	-435	0	9,015	256	202	2,829	6,244
15	29,991	554	0	9,581	261	199	2,879	6,343
16	30,093	102	0	9,696	261	199	2,879	6,614
17	29,800	-293	0	9,427	261	199	2,879	6,554
18	30,165	365	0	9,683	261	199	2,879	6,776
19	30,391	226	0	9,050	261	199	2,879	6,135
20	30,093	-298	0	8,745	261	199	2,879	5,977
21	30,254	161	0	9,429	196	199	2,882	6,371
22	29,375	-879	0	8,770	196	177	1,979	6,406
23	30,150	775	0	9,203	196	177	1,979	5,830
24	29,715	-435	0	9,198	196	177	1,979	6,674
25	29,901	186	0	8,926	196	177	1,979	6,371
26	30,024	123	0	8,405	196	177	1,979	5,599
27	29,167	-857	0	8,454	196	177	1,979	5,733
28	29,448	281	0	9,300	198	177	1,990	5,898
29	29,539	91	0	9,426	317	148	2,682	6,341
30	30,611	1,072	0	8,959	317	148	2,682	5,485
31	30,019	-592	0	8,295	317	148	2,682	5,846
Total		1,114	0	289,601	7,825	5,877	84,080	193,866
Mean cfs		---	0	9,342	252	190	2,712	6,254
Acre-feet		1,114	0	574,427	15,520	11,658	166,773	384,530
								5,168

1/ San Luis Canal includes Pools 14 through 21 of the California Aqueduct.

2/ Includes 2,992 AF AG & 1 AF M&I to Pacheco W.D., 196 AF to the City of Dos Palos, and 12,331 AF to San Luis Water District.

3/ Includes 141 AF to the City of Huron, 303 AF to the City of Avenal, 1,146 AF to the City of Coalinga, 435 AF to Lemoore N.A.S.

@30L, 1 AF to F&G @ WWD Lateral 4L, 2 AF to Broadview W.D., and 164,745 AF to Westlands WD.

Table 21. San Joaquin Field Division Plant Data

(in acre-feet)

July 2004

Date	Coastal Aqueduct					California Aqueduct			
	Las Perillas Pumping Plant	Badger Hill Pumping Plant	Devil's Den Pumping Plant	Bluestone Pumping Plant	Polonio Pass Pumping Plant	Buena Vista Pumping Plant	Teerink Pumping Plant	Chrisman Pumping Plant	Edmonston Pumping Plant
1	543	543	135	129	133	6,879	6,766	6,338	6,146
2	534	534	141	133	143	7,283	6,191	6,565	6,415
3	722	722	137	129	135	7,876	7,540	7,059	6,879
4	575	575	179	169	176	7,502	7,596	7,296	7,088
5	470	470	103	101	115	6,905	6,964	6,537	6,387
6	469	469	134	127	133	6,964	6,701	6,253	6,159
7	569	569	164	151	158	7,537	7,184	6,710	6,466
8	518	518	111	104	112	7,449	7,075	6,590	6,334
9	488	488	163	154	163	7,514	7,165	6,747	6,585
10	645	645	137	128	140	7,830	7,468	7,121	6,983
11	628	628	137	127	137	8,357	8,184	7,914	7,735
12	466	466	134	131	144	6,338	6,177	5,850	5,698
13	509	509	142	131	144	7,275	7,029	6,739	6,580
14	513	513	122	113	126	7,592	6,819	6,483	6,280
15	575	575	138	130	142	6,915	7,352	6,164	5,947
16	524	524	135	126	137	7,366	6,789	6,470	6,296
17	637	637	125	114	122	7,466	7,234	6,852	6,695
18	578	578	140	128	139	8,166	8,300	8,093	8,057
19	459	459	142	133	144	7,353	7,168	6,826	6,596
20	477	477	139	131	141	7,327	7,132	6,816	6,599
21	542	542	120	111	122	7,655	7,103	6,524	6,553
22	499	499	128	119	131	7,437	7,211	6,842	6,717
23	416	416	127	118	130	6,960	7,112	6,669	6,520
24	542	542	102	96	103	7,817	7,669	7,211	7,061
25	584	584	171	256	170	7,545	7,674	7,355	7,476
26	460	460	124	117	127	6,691	6,612	6,291	6,164
27	493	493	129	118	129	7,222	6,756	6,435	6,333
28	518	518	122	115	121	7,409	6,947	6,542	6,392
29	483	483	140	131	142	7,541	7,144	6,759	6,679
30	442	442	121	112	120	6,802	6,631	6,375	6,276
31	537	537	121	111	120	7,181	6,908	6,516	6,530
Total	16,415	16,415	4,163	3,993	4,199	228,154	220,601	208,942	204,626

Table 22a. Governor Edmund G. Brown California Aqueduct

San Joaquin Field Division, Monthly Deliveries

(In acre-feet)

July 2004

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries									
	Beginning and Ending					Table A Amount	USBR	Purchase Pool A	Purchase Pool B	Other					
	No.	Structure	Mile												
7	21	Check No. 21	172.40		384,530										
8C	22			Empire West Side Irrig. Dist. TL - A	0	500 3,068 317 1,108 917 5,870 4 2,823		137 154	1/ 910 1/ 3,208 2/ 4,000						
				172.66	County of Kings TL - A										
				175.18	TLBWSD TL-A										
				177.54	DRWD - 1										
				180.64	DRWD - 1B										
				180.65	TLBWSD - C										
				182.99	DRWD - 1A										
				183.00	DRWD - 2										
				184.00	Tulare Lake Basin WSD TL - B										
				184.63	DRWD - Paramount										
31A	8D			184.78	Coastal Branch	16,415		137	154	4,118					
					Dudley Ridge Water Dist. DRWD - 3										
8D	22				Dudley Ridge Reach 8D Total:	9,578 12,938		137 0	154 0	4,118 4,000					
				Check No. 22	184.82										
					Kern County Water Agency Lost Hills Water Dist. - 1		8,219 1,562 173 1,971								
					Kern County Water Agency Lost Hills Water Dist. - 2										
					Kern County Water Agency Lost Hills Water Dist. - 3										
					Kern County Water Agency Berrenda Mesa - 2										
					Kern County Water Agency Lost Hills Water Dist. - 4										
					K.C.W.A. Reach 9 Subtotal:										
				Check No. 23	197.05										
9	23			201.24	Kern County Water Agency Lost Hills Water Dist. - 7	685 2,163 19 2,855 1,801 910 11,950		0	0	0					
				202.05	Kern County Water Agency Lost Hills Water Dist. - 5										
				204.69	Kern County Water Agency Lost Hills Water Dist. - 6										
				205.26	Kern County Water Agency Lost Hills Water Dist. - 8										
				Check No. 24	207.94										
					209.71										
					Kern National Wildlife Refuge USBR BV-1B										
				209.78	Kern County Water Agency Buena Vista WSD 1B										
				209.80	KCWA Semitropic WSD										
10A	25				KCWA Semitropic WSD Penstocks	910 13,950 0 22,383		0 0 0 0	0 0 0 0	3/ 2,000 2,000					
					USBR Total:										
					K.C.W.A. Reach 10A Subtotal:										

1/ San Gorgonio Valley MWD water delivered to Dudley Ridge. WD.

2/ San Joaquin River Exchange Contractors Authority water delivered to Tulare Lake Basin WSD.

3/ Change in point of delivery to allow Alameda Co. WD to store a portion of 2004 approved SWP supplies in Semitropic WD.

Table 22b. Governor Edmund G. Brown California Aqueduct
San Joaquin Field Division, Monthly Deliveries (Continued)

(In acre-feet)

July 2004

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	USBR	Purchase Pool A	Purchase Pool B	Other		
	No.	Structure	Mile									
11B	25	Kern County Water Agency Belridge - 2	210.75	Kern County Water Agency Belridge - 3	0	491						
			214.11	Kern County Water Agency Belridge - 4	491							
			216.62	Kern County Water Agency Belridge - 5	0							
			217.13	Kern County Water Agency Belridge - 5D	19,110							
			Check No. 25	217.79	K.C.W.A. Reach 11B Subtotal:	121						
					19,722	19,722	0	0	0	0		
12D	26	Kern County Water Agency Belridge - 6	219.58	Kern County Water Agency West Kern - 3	0	416						
			Check No. 26	224.92								
12E	27	Kern County Water Agency Buena Vista - 6	230.37	Kern County Water Agency Buena Vista - 2	6,576	6,576						
			Check No. 27	231.73								
	28	Kern County Water Agency Buena Vista - 2	235.75	Kern County WA CVC	9,467	9,467				2/ 757		
				DRWD CVC	0							
				Tulare Co.	0							
			238.04	Lower Tule River	0							
				Fresno Co.	0							
				Pixley ID	0							
				Hacienda	0							
				DWR Wells	0							
			Check No. 28	238.11								
				1/ Arvin Edison Total:	0							
				Reach 12E Subtotal:	36,140	35,383	0	0	0	757		
13B	29	Kern Water Bank Inflow	238.19	Kern Water Bank Outflow	0	13,640						
			241.02	Kern River Intertie (inflow)	0							
			242.85	KCWA Buena Vista WSD - 7	13,640							
			243.09	KCWA Buena Vista WSD - 5	146							
			Check No. 29	Kern County Water Agency Buena Vista - 3	4,889							
			244.54	Buena Vista WSD	0							
	30	Kern County Water Agency Buena Vista - 4	249.85	Buena Vista Pumping Plant	1,850	1,850						
			250.99	K.C.W.A. Reach 13B Subtotal:	228,154							
					20,525	20,525	0	0	0	0		
14A	31	Kern County Water Agency West Kern - 2	254.47	Kern County Water Agency Wheeler Ridge-Maricopa - 2	0	261						
			256.11		261							

1/ Arvin Edison Contractors include Rag Gulch WD, Kern-Tulare WD, Fresno County, Hills Valley ID, Tri Valley WD, Tulare County, Lower Tule River ID, and Pixley ID.

2/ Dudley Ridge WD water sent to Kern County WA.

Table 22c. Governor Edmund G. Brown California Aqueduct

San Joaquin Field Division, Monthly Deliveries (Continued)

(In acre-feet)

July 2004

Reach No.	Operating Pool			Turnout	Total Diver-sions	Deliveries						
	Beginning and Ending					Table A Amount	USBR	Purchase Pool A	Purchase Pool B	Other		
	No.	Structure	Mile									
14A	31	Check No. 31	256.14		Kern County Water Agency Wheeler Ridge-Maricopa - 3	386	386	0	0	0		
	32		258.61									
			260.44		Kern County Water Agency Wheeler Ridge-Maricopa - 4	2,156	2,156	0	0	0		
	Check No. 32		261.72		KCWA Reach 14A Subtotal:		2,803	0	0	0		
14B	33		264.42		Kern County Water Agency Wheeler Ridge-Maricopa - 5	5,825	5,825	0	0	0		
			266.91		Kern County Water Agency Wheeler Ridge-Maricopa - 6		1,013	0	0	0		
			267.36		Check No. 33							
	34		270.24		Kern County Water Agency Wheeler Ridge-Maricopa - 7	3,995	3,995	0	0	0		
			271.27		Check No. 34							
					Reach 14B Total:		10,833	0	0	0		
14C	35		272.39		Kern County Water Agency Wheeler Ridge-Maricopa - 8	2,623	2,623	0	0	0		
			276.09		Kern County Water Agency Wheeler Ridge-Maricopa - 9		1,418	0	0	0		
					Reach 14C Total:		4,041	0	0	0		
	Teerink Pumping Plant		278.13			220,601						
15A	36		279.02		Kern County Water Agency Wheeler Ridge-Maricopa - 9A	814	814	0	0	0		
			280.06		Kern County Water Agency Wheeler Ridge-Maricopa - 10		5,543	0	0	0		
					Reach 15-A Total:		6,357	0	0	0		
	Chrisman Pumping Plant		280.36			208,942						
16A	37		282.06		Kern County Water Agency Wheeler Ridge-Maricopa - 11	0	0	0	0	0		
			283.95		Check No. 37							
	38		285.01		Kern County Water Agency Wheeler Ridge-Maricopa - 12	27	27	0	0	0		
			286.39		Kern County Water Agency Wheeler Ridge-Maricopa - 13A		156	0	0	0		
			287.06		Kern County Water Agency Wheeler Ridge-Maricopa - 13		0	0	0	0		
	Check No. 38		287.09		Reach 16A Total:		246	0	0	0		
	39		287.62		Kern County Water Agency Wheeler Ridge-Maricopa - 13B	246	246	0	0	0		
			290.21		Check No. 39							
17E	40		291.26		Kern County Water Agency Wheeler Ridge-Maricopa - 14	1,426	1,426	0	0	0		
			293.07		Kern County Water Agency Wheeler Ridge-Maricopa - 15		433	0	0	0		
					Kern County Water Agency Tehachapi Cummings CWD		1,246	0	0	0		
					K.C.W.A. Reach 16A Subtotal:		3,534	0	0	0		
	Edmonston Pumping Plant		293.45			204,626						

Table 23. Governor Edmund G. Brown California Aqueduct

San Joaquin Field Division, Monthly Deliveries (Coastal Branch)

(In acre-feet)

July 2004

Reach No.	Operating Pool			Turnout	Total Diver-sions	Deliveries						
	Beginning and Ending					Table A Amount	USBR	Purchase Pool A	Purchase Pool B	Other		
	No.	Structure	Mile									
31A	C-1	Coastal Branch Control	0.02		16,415							
		Las Perillas Pumping Plant	1.16		16,415							
	C-2		3.79	Green Valley Water District	0							
		Badger Hill Pumping Plant	4.27		16,415							
	C-3	Coastal Check No. 3	7.21									
	C-4		9.34	Castaic Lake WA (Devil's Den WD #1)	0							
		Coastal Check No. 4	9.34									
	C-5	Coastal Check No. 5	12.20									
	C-6		13.30	Kern County Water Agency Berrenda Mesa - 3	10,466	10,466						
			14.83	Kern County Water Agency Berrenda Mesa - 1	1,457							
		Devil's Den Pumping Plant	14.86	Kern County Water Agency Berrenda Mesa - PO	0							
					4,163							
				K.C.W.A. Reach 31A Subtotal:	11,923	11,923	0	0	0	0		
				K.C.W.A. Total:	150,602	147,845	0	0	0	2,757		
33A	C-7	Bluestone Pumping Plant	19.05		3,993							
	C-8	Polonio Pass Pumping Plant	26.54		4,199							
	C-9	Tank Site 1	27.81	(CCWA) Polonio Pass Treatment Plant								
	C-10	Shandon T.O.	38.23	Santa Barbara County (CCWA)	3,769	3,544						
		Tank Site 2	58.63	Central Coast:	0							
34	C-11	Chorro Valley T.O.	69.31	San Luis Obispo County (CCWA)	457	457						
		Energy Dissipater	78.12									
35	C-12	Lopez T.O.	85.86	SLOCFC & WCD	0	4,001	0	0	0	0		
				CCWA Total:	4,001							
		Guadalupe T.O.	102.70	SBCFC & WCD	0							
		Santa Maria T.O.	107.43	SBCFC & WCD	0							
38		So. Cal. Water T.O.	109.20	SBCFC & WCD	0	0	0	0	0	0		
				SBCFC & WCD Total:	0							
		Tank Site 5	115.42									

1/ Dudley Ridge WD sent this exchange water to Santa Barbara County WA.

Table 24. Southern Field Division Plant Data

(in acre-feet)

July 2004

Date	West Branch					East Branch											
	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant		Alamo Powerplant			Pearblossom Pumping Plant	Mojave Siphon Powerplant			Devil Canyon Powerplant Generation	Cherry Valley	Green Spot	Crafton Hills	
		Generation	Bypass	Generation 1/	Pumpback 1/	Generation	Bypass Through Plant	Cottonwood Chute		Generation	Leakage	Bypass Flume					
28	1	2,904	3,041	0	8,517	3,330	3,189	0	37	3,064	3,028	0	0	3,195	5	23	14
	2	2,821	3,057	0	8,772	1,929	3,250	0	341	3,001	2,858	0	0	3,204	0	23	19
	3	3,388	3,112	0	1,901	3,317	3,325	0	132	3,115	3,129	0	0	3,206	0	5	0
	4	3,463	3,173	0	2,455	1,286	3,325	0	169	3,183	3,215	0	0	3,172	0	6	0
	5	2,716	3,078	0	4,374	3,270	3,463	0	172	3,286	3,354	0	0	3,067	0	6	0
	6	2,902	3,033	0	7,316	1,875	3,001	0	269	2,970	3,034	0	0	3,150	5	21	11
	7	2,943	3,051	0	6,484	3,141	3,354	0	182	3,052	3,272	0	0	3,184	0	22	13
	8	3,022	3,056	0	6,693	2,081	3,030	0	207	2,838	2,824	0	0	3,169	2	21	12
	9	2,905	3,075	0	6,013	851	3,228	0	379	3,085	3,051	0	0	3,106	0	22	18
	10	3,198	2,940	0	3,923	1,666	3,532	0	235	3,136	3,266	0	0	3,247	0	5	0
	11	3,838	2,835	0	2,061	3,409	3,579	0	285	3,342	3,390	0	0	3,277	0	0	0
	12	2,804	2,787	0	5,013	1,632	2,722	0	124	2,803	3,084	0	0	3,180	8	27	19
	13	2,737	3,220	0	6,028	2,349	3,440	0	321	2,997	2,898	0	0	3,074	8	25	17
	14	2,853	3,061	0	5,353	982	3,125	0	307	2,942	3,049	0	0	3,193	0	25	17
	15	2,843	3,076	0	4,748	914	2,858	0	176	2,729	2,582	0	0	3,141	10	27	17
	16	2,664	3,027	0	5,454	1,459	3,080	0	495	3,339	3,384	0	0	3,250	0	23	11
	17	3,144	2,993	0	1,317	2,270	3,072	0	447	2,766	2,894	0	0	3,190	0	4	0
	18	4,005	3,090	0	2,011	2,024	3,565	0	362	3,620	3,460	0	0	3,121	0	0	0
	19	3,058	3,062	0	6,689	0	3,258	0	306	3,075	3,310	0	0	3,286	8	19	12
	20	2,997	2,856	0	5,765	1,525	3,366	0	257	3,108	3,102	0	0	3,177	2	64	11
	21	2,990	2,799	0	2,477	2,477	3,443	0	83	3,224	3,241	0	0	3,062	4	27	13
	22	3,150	3,067	0	7,068	975	3,216	0	354	3,187	3,379	0	0	3,038	3	24	11
	23	2,737	2,935	0	2,803	752	3,307	0	415	2,930	3,082	0	0	3,303	0	29	16
	24	3,016	2,918	0	3,892	2,124	3,494	0	570	3,307	3,354	0	0	3,063	0	15	0
	25	3,333	2,726	0	1,247	2,242	3,562	0	423	3,331	3,356	0	0	3,303	0	14	0
	26	2,775	3,149	0	4,272	1,982	3,292	0	176	3,286	3,146	0	0	2,995	8	31	17
	27	2,855	3,003	0	5,890	1,448	3,465	0	57	3,410	3,554	0	0	3,340	0	23	15
	28	2,946	3,074	0	5,807	2,394	3,210	0	179	2,728	2,775	0	0	3,135	0	20	16
	29	2,984	3,067	0	6,379	1,935	3,300	0	337	3,026	3,083	0	0	3,020	0	5	0
	30	2,717	3,201	0	5,917	1,473	3,139	0	367	3,118	3,157	0	0	3,047	0	2	0
	31	2,823	2,150	0	3,587	2,399	3,294	0	390	3,086	3,099	0	0	3,129	0	6	0
Total		93,531	92,712	0	150,226	59,511	101,484	0	8,554	96,084	97,410	0	0	98,024	63	564	279

1/ Values supplied by LADWP, not verified by DWR.

Table 25. Pyramid Lake

Daily Operation

Capacity: 171,200 ac-ft

July 2004

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			United Water Agency	Computed Losses (-) And Gains (+)	
				Project		Natural	Project		Natural			
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek			
Jun 30	2574.35	165,232										
1	2572.55	162,960	-2,272	3,330	3,041	5	8,517	0	53	0	-78	
2	2569.42	159,060	-3,900	1,929	3,057	5	8,772	0	53	0	-66	
3	2572.94	163,451	4,391	3,317	3,112	5	1,901	0	53	0	-89	
4	2574.48	165,396	1,945	1,286	3,173	5	2,455	0	53	0	-11	
5	2575.91	167,217	1,821	3,270	3,078	5	4,374	1	52	0	-105	
6	2573.89	164,649	-2,568	1,875	3,033	5	7,316	0	52	0	-113	
7	2573.54	164,207	-442	3,141	3,051	5	6,484	0	52	0	-103	
8	2572.13	162,433	-1,774	2,081	3,056	5	6,693	0	52	0	-171	
9	2570.35	160,212	-2,221	851	3,075	5	6,013	0	52	0	-87	
10	2570.77	160,735	523	1,666	2,940	5	3,923	0	52	0	-113	
11	2573.99	164,776	4,041	3,409	2,835	4	2,061	0	52	0	-94	
12	2573.52	164,182	-594	1,632	2,787	4	5,013	0	52	0	48	
13	2572.89	163,388	-794	2,349	3,220	4	6,028	1	52	0	-286	
14	2571.74	161,945	-1,443	982	3,061	4	5,353	0	52	0	-85	
15	2571.02	161,046	-899	914	3,076	4	4,748	0	52	0	-93	
16	2570.16	159,977	-1,069	1,459	3,027	4	5,454	0	52	0	-53	
17	2573.18	163,753	3,776	2,270	2,993	4	1,317	0	52	0	-122	
18	2575.49	166,681	2,928	2,024	3,090	4	2,011	0	52	0	-127	
19	2572.52	162,923	-3,758	0	3,062	4	6,689	0	52	0	-83	
20	2571.18	161,246	-1,677	1,525	2,856	4	5,765	0	52	0	-245	
21	2573.29	163,892	2,646	2,477	2,799	4	2,477	0	52	0	-105	
22	2570.55	160,461	-3,431	975	3,067	4	7,068	1	52	0	-356	
23	2571.20	161,271	810	752	2,935	4	2,803	0	52	0	-26	
24	2571.98	162,246	975	2,124	2,918	4	3,892	0	52	0	-127	
25	2574.79	165,790	3,544	2,242	2,726	4	1,247	0	52	0	-129	
26	2575.38	166,541	751	1,982	3,149	4	4,272	0	52	0	-60	
27	2574.13	164,953	-1,588	1,448	3,003	4	5,890	0	52	0	-101	
28	2573.75	164,472	-481	2,394	3,074	4	5,807	0	52	0	-94	
29	2572.44	162,821	-1,651	1,935	3,067	3	6,379	0	52	0	-225	
30	2571.37	161,483	-1,338	1,473	3,201	3	5,917	0	52	0	-46	
31	2572.04	162,321	838	2,399	2,150	3	3,587	0	52	0	-75	
Total				-2,911	59,511	92,712	131	150,226	3	1,616	0	-3,420

1/ Values supplied by LADWP, not verified by DWR.

Table 26. Elderberry Forebay

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

July 2004

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)	
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake			
							Natural	Project 1/		
Jun 30	1516.30	21,691								
1	1520.70	23,540	1,849	8,517	0	3,330	0	3,337	-1	
2	1525.70	25,727	2,187	8,772	0	1,929	0	4,657	1	
3	1508.02	18,430	-7,297	1,901	0	3,317	0	5,881	0	
4	1511.40	19,727	1,297	2,455	0	1,286	0	0	128	
5	1506.00	17,677	-2,050	4,374	0	3,270	0	3,156	2	
6	1511.10	19,610	1,933	7,316	0	1,875	0	3,506	-2	
7	1510.40	19,338	-272	6,484	0	3,141	0	3,615	0	
8	1512.10	20,001	663	6,693	0	2,081	0	3,950	1	
9	1512.90	20,317	316	6,013	0	851	0	4,845	-1	
10	1514.50	20,958	641	3,923	0	1,666	0	1,617	1	
11	1511.00	19,571	-1,387	2,061	0	3,409	0	0	-39	
12	1519.30	22,943	3,372	5,013	0	1,632	0	0	-9	
13	1518.70	22,690	-253	6,028	0	2,349	0	3,933	1	
14	1519.90	23,198	508	5,353	0	982	0	3,863	0	
15	1521.80	24,013	815	4,748	0	914	0	3,019	0	
16	1520.10	23,283	-730	5,454	0	1,459	0	4,725	0	
17	1507.80	18,347	-4,936	1,317	0	2,270	0	3,983	0	
18	1506.59	17,895	-452	2,011	0	2,024	0	438	-1	
19	1522.90	24,491	6,596	6,689	0	0	0	0	-93	
20	1525.98	25,852	1,361	5,765	0	1,525	0	2,881	2	
21	1514.97	21,148	-4,704	2,477	0	2,477	0	4,702	-2	
22	1520.23	23,339	2,191	7,068	0	975	0	3,903	1	
23	1514.38	20,909	-2,430	2,803	0	752	0	4,481	0	
24	1508.76	18,710	-2,199	3,892	0	2,124	0	3,965	-2	
25	1506.20	17,751	-959	1,247	0	2,242	0	0	36	
26	1512.10	20,001	2,250	4,272	0	1,982	0	0	-40	
27	1516.04	21,584	1,583	5,890	0	1,448	0	2,859	0	
28	1515.15	21,221	-363	5,807	0	2,394	0	3,775	-1	
29	1517.35	22,125	904	6,379	0	1,935	0	3,540	0	
30	1515.00	21,161	-964	5,917	0	1,473	0	5,409	1	
31	1507.65	18,291	-2,870	3,587	0	2,399	0	4,058	0	
Total			-3,400	150,226	0	59,511	0	94,098	-17	

1/ Values supplied by LADWP, not verified by DWR.

Table 27. Castaic Lake

Daily Operation

(in acre-feet except as noted)

Capacity: 323,699 ac-ft

July 2004

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow		Computed Losses (-) And Gains (+)	
				From Elderberry Forebay /1		Natural	Deliveries		
				Natural	Project				
Jun 30	1493.44	277,601							
1	1493.82	278,377	776	0	3,337	0	2,624	0	
2	1494.92	280,632	2,255	0	4,657	0	2,465	0	
3	1496.69	284,283	3,651	0	5,881	0	2,336	0	
4	1495.58	281,990	-2,293	0	0	0	2,358	0	
5	1496.03	282,919	929	0	3,156	0	2,282	0	
6	1496.60	284,097	1,178	0	3,506	0	2,278	0	
7	1497.29	285,527	1,430	0	3,615	0	2,261	0	
8	1498.10	287,212	1,685	0	3,950	0	2,315	0	
9	1499.31	289,739	2,527	0	4,845	0	2,343	0	
10	1498.98	289,049	-690	0	1,617	0	2,398	0	
11	1497.81	286,608	-2,441	0	0	0	2,520	0	
12	1496.64	284,180	-2,428	0	0	0	2,325	0	
13	1497.42	285,797	1,617	0	3,933	0	2,429	0	
14	1497.99	286,983	1,186	0	3,863	0	2,494	0	
15	1498.26	287,545	562	0	3,019	0	2,601	0	
16	1499.13	289,362	1,817	0	4,725	0	2,652	0	
17	1499.55	290,242	880	0	3,983	0	2,690	0	
18	1498.56	288,171	-2,071	0	438	0	2,597	0	
19	1497.27	285,486	-2,685	0	0	0	2,617	0	
20	1497.30	285,548	62	0	2,881	0	2,814	0	
21	1498.18	287,379	1,831	0	4,702	0	2,765	0	
22	1498.75	288,568	1,189	0	3,903	0	2,734	0	
23	1499.53	290,200	1,632	0	4,481	0	2,761	0	
24	1500.06	291,312	1,112	0	3,965	0	2,762	0	
25	1498.77	288,610	-2,702	0	0	0	2,622	0	
26	1497.42	285,797	-2,813	0	0	0	2,838	0	
27	1497.33	285,610	-187	0	2,859	0	2,762	0	
28	1497.84	286,671	1,061	0	3,775	0	2,442	100	
29	1498.29	287,598	927	0	3,540	0	2,612	100	
30	1499.53	290,200	2,602	0	5,409	0	2,656	100	
31	1500.25	291,712	1,512	0	4,058	0	2,733	0	
Total			14,111	0	94,098	0	79,086	300	
								-601	

1/ Values supplied by LADWP, not verified by DWR.

Table 28. Governor Edmund G. Brown California Aqueduct

Southern Field Division, Monthly Deliveries (West Branch)

(In acre-feet)

July 2004

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	Rec.	Local	Transfer 2/	Arvin-Edsion Water Bank Recovery		
	No.	Structure	Mile									
29A	42	Oso Pumping Plant	1.49		93,531							
29F	W2	Quail Lake	5.02	Antelope Valley-East Kern Water Agency	Re-moved	1,616	3					
		Quail Lake Embankment	7.82	Antelope Valley-East Kern Water Agency	Stub							
29G		Warne Power Plant	14.07		92,712							
29H	W3	Pyramid Lake		Calif. State Park Pyramid Recreation	3	1,616	3					
			14.10	United Water Conservation Dist.	1,616							
		Pyramid Dam	17.10	Piru Creek Fish Enhancement	0							
29J	W4	Castaic Power Plant	25.82	(59,511 AF pumpback) 2/	150,226							
		Elderberry Forebay										
		Forebay Dam	28.12									
30 1/	W5	Castaic Lake		Calif. State Park Castaic Lake Recreation	48	14,628 56,140 2,839 3,295 154	48			1,982		
		Castaic Dam	31.47									
		Castaic Lake Outlet		MWD - 78"	16,610							
				MWD - 132"	56,140							
			31.55	Castaic Lake WA - T1	2,839							
				Castaic Lake WA	3,295							
				United Water Conservation Dist.	0							
				MWD - Ventura County FCD	154							
				LA Co. Parks & Recreation	0							
				Releases to Lagoon	300							
				Reach 30 Subtotal:	79,086	77,056	48	0	0	1,982		
	W6	Castaic Lagoon		Recreation to Lagoon	300		300					
		Castaic Lagoon Outlet	31.87		171							

1/ Reach 30 actually terminates at mile 31.50. It is shown here as including the outlet works at mile 31.55.

All deliveries from the outlet works and from the Lagoon are billed to Reach 30.

2/ Value supplied by LADWP, not verified by DWR.

Table 29. Silverwood Lake

Daily Operation

(in acre-feet except as noted)

Capacity: 74,970 ac-ft

July 2004

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow					Computed Losses (-) And Gains (+)	Las Flores Ranch Exchange 1/	
							Project			Del. To Mojave W.A.	Natural To Mojave River			
				Mojave Siphon Power-plant	Mojave Bypass Flume	Natural Stream Flow	Delivered to CLAWA	Rec.	San Bernardino Tunnel					
Jun 30	3352.47	72,523												
1	3352.27	72,331	-192	3,028	0	1	10	0	3,195	0	1	-15	5	
2	3351.88	71,958	-373	2,858	0	0	10	1	3,204	0	0	-16	5	
3	3351.80	71,882	-76	3,129	0	0	10	0	3,206	0	1	12	5	
4	3351.79	71,873	-9	3,215	0	1	10	1	3,172	0	0	-42	5	
5	3352.16	72,226	353	3,354	0	0	10	0	3,067	0	1	77	5	
6	3352.21	72,274	48	3,034	0	0	10	1	3,150	0	0	175	5	
7	3352.24	72,302	28	3,272	0	1	10	0	3,184	0	1	-50	5	
8	3351.91	71,987	-315	2,824	0	0	10	1	3,169	0	0	41	5	
9	3351.85	71,930	-57	3,051	0	0	10	0	3,106	0	1	9	6	
10	3351.71	71,796	-134	3,266	0	1	10	1	3,247	0	0	-143	5	
11	3351.93	72,006	210	3,390	0	0	10	0	3,277	0	1	108	5	
12	3351.82	71,901	-105	3,084	0	0	10	1	3,180	0	1	3	5	
13	3351.77	71,853	-48	2,898	0	1	10	0	3,074	0	0	137	5	
14	3351.43	71,530	-323	3,049	0	0	10	1	3,193	0	1	-167	5	
15	3350.70	70,837	-693	2,582	0	0	10	0	3,141	0	0	-124	5	
16	3351.06	71,178	341	3,384	0	1	10	1	3,250	0	1	218	5	
17	3350.70	70,837	-341	2,894	0	0	10	0	3,190	0	1	-34	5	
18	3351.06	71,178	341	3,460	0	0	10	1	3,121	0	0	13	5	
19	3351.15	71,264	86	3,310	0	0	10	0	3,286	0	1	73	6	
20	3351.09	71,207	-57	3,102	0	0	10	1	3,177	0	0	29	6	
21	3351.26	71,368	161	3,241	0	0	10	0	3,062	0	0	-8	5	
22	3351.43	71,530	162	3,379	0	0	10	1	3,038	0	0	-168	5	
23	3351.37	71,473	-57	3,082	0	0	10	0	3,303	0	0	174	5	
24	3351.60	71,691	218	3,354	0	0	9	1	3,063	0	1	-62	6	
25	3351.60	71,691	0	3,356	0	0	9	0	3,303	0	0	-44	6	
26	3351.82	71,901	210	3,146	0	0	9	1	2,995	0	0	69	6	
27	3352.02	72,092	191	3,554	0	0	10	0	3,340	0	0	-13	6	
28	3351.60	71,691	-401	2,775	0	0	10	0	3,135	0	0	-31	6	
29	3351.71	71,796	105	3,083	0	0	10	1	3,020	0	0	53	6	
30	3351.85	71,930	134	3,157	0	0	10	0	3,047	0	0	34	6	
31	3351.65	71,739	-191	3,099	0	0	10	0	3,129	0	5	-146	6	
Total				-784	97,410	0	6	307	14	98,024	0	17	162	166

1/ Project water delivered from Mojave Siphon in exchange for like amount of Natural Streamflow.

Table 30. Lake Perris

Daily Operation

(in acre-feet except as noted)

Capacity: 131,452 ac-ft

July 2004

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow 1/	Outflow 2/	Computed Losses (-) Gains (+) 1/
Jun 30	1583.98	117,754				
1	1583.99	117,777	23		8	
2	1583.97	117,732	-45		9	
3	1584.00	117,799	67		9	
4	1584.00	117,799	0		9	
5	1584.00	117,799	0		9	
6	1584.06	117,933	134		9	
7	1584.00	117,799	-134		8	
8	1583.93	117,643	-156		9	
9	1583.68	117,087	-556		9	
10	1583.66	117,042	-45		33	
11	1583.62	116,953	-89		9	
12	1583.68	117,087	134		9	
13	1583.64	116,998	-89		8	
14	1583.72	117,176	178		20	
15	1583.60	116,909	-267		71	
16	1583.49	116,665	-244		206	
17	1583.52	116,731	66		120	
18	1583.50	116,687	-44		8	
19	1583.52	116,731	44		9	
20	1583.53	116,753	22		8	
21	1583.55	116,798	45		8	
22	1583.65	117,020	222		9	
23	1583.68	117,087	67		9	
24	1583.83	117,420	333		9	
25	1583.90	117,576	156		94	
26	1583.96	117,710	134		8	
27	1583.63	116,976	-734		9	
28	1583.82	117,398	422		8	
29	1583.84	117,443	45		68	
30	1583.70	117,131	-312		9	
31	1583.50	116,687	-444		9	
Total			-1,067	2,190	820	-2,437

1/ Readings are not taken on a daily basis. End of month only.

2/ Includes only deliveries of 820 AF to MWD from Reach 28J.

Table 31a. Governor Edmund G. Brown California Aqueduct
Southern Field Division, Monthly Deliveries (East Branch)

July 2004

(In acre-feet)

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	Rec.	Transfer	Purchase Pool A	Transfer Local Out		
	No.	Structure	Mile									
17E	40	Edmonston Pumping Plant	293.45		204,626							
	41		298.65		Kern County Water Agency Tej.-Cas							
17F		Check No. 41	303.41									
18A	42	Check No. 42	304.99									
19	43	Alamo Powerplant	305.73		(Does not include 8,554 AF flow down Cottonwood Chute)							
			308.05		Antelope Valley-East Kern WA							
		Check No. 43	309.70									
	44		311.84		LADWP Connection							
			313.50		AVEK 245th Street West							
		Check No. 44	314.81									
	45		314.93		AVEK 235th Street West							
			315.57		AVEK 225th Street West							
		Check No. 45	319.74									
	46		323.19		Antelope Valley-East Kern WA Fairmont							
					Mojave Water Agency Fairmont							
		Check No. 46	323.84									
					Reach 19 Total:							
					2,214	2,008	0	206	0	0		
20A	47	Check No. 47	326.77									
	48		326.91		Antelope Valley-East Kern WA Willow Springs Siphon							
			329.65		Antelope Valley-East Kern WA 120th Street West							
		Check No. 48	330.82									
	49	Check No. 49	335.93									
	50		336.73		AVEK WA - Quartz Hill (Wheeled for Palmdale WD)							
					Antelope Valley-East Kern WA							
			339.68		Antelope Valley-East Kern WA							
	52	Check No. 50	341.51									
		51	Check No. 51	342.07								
				342.80	Antelope Valley-East Kern WA 30th Street West							
20B	53		343.50	Antelope Valley-East Kern WA Temporary 10 & 12								
		Check No. 52	343.74									
				346.98	PWD Palmdale							
	54		348.14	Antelope Valley-East Kern WA Acton Treatment Plant								
		Check No. 53	348.17									
				349.52	Palmdale Water District Temporary							
	55	Check No. 54	350.25									
	56	Check No. 55	352.70									
	57	Check No. 56	354.76									
			354.97		Littlerock Creek I.D.							
		Check No. 57	356.93									
22A	58		357.60		Antelope Valley-East Kern WA							
			357.72		Antelope Valley-East Kern WA 96th Street East							
			359.82		Antelope Valley-East Kern WA East Side Treatment Plant							
					701	155	153	701				

Table 31b. Governor Edmund G. Brown California Aqueduct

Southern Field Division, Monthly Deliveries (East Branch, Continued)

(In acre-feet)

July 2004

Reach No.	Operating Pool		Turnout	Total Diversions	Deliveries								
	Beginning and Ending				Table A Amount	Recreation	Ex-change	ST Bank Recovery	Arvin-Edsion Water Bank Recovery				
	No.	Structure	Mile										
22B	58	Pearblossom Pumping Plant	360.61	Antelope Valley-East Kern WA	96,084	41	41	428	391				
	59	Check No. 59	366.09										
	60		366.50										
		Check No. 60	373.94										
	61	Check No. 61	379.00										
	62	Check No. 62	384.26										
	63	Check No. 63	389.20	Mojave Water Agency Mojave River	428								
	66		394.60	Mojave Water Agency Temporary	0								
			401.10	Mojave Water Agency Morongo 24" and 42"	391								
23	Check No. 66		403.41	Mojave Water Agency Hesperia	0	166	166	307	14				
24	67	Mojave Siphon Powerplant	405.48	Las Flores Ranch	166	97,410	307	14	307				
25	Silverwood Lake	405.65	407.65	Crestline Lake Arrowhead Water Agency	307	307	14	307	14				
26A	San Bernardino Tunnel Intake	407.70	412.73	Calif. State Park Silverwood Agency (Rec.)	14	98,024	6,329	6,329	23,000				
28G	68	Devil Canyon Afterbay Control Structures	412.88	MWD-SC Rialto	6,329	1,199	1,199	27,453	23,000				
28H	425.46	Santa Ana Valley Pipeline	433.06	MWD-SC Box Springs	12,025	12,025	12,025	20,974	23,000				
28J	440.05	442.00	443.44	MWD-SC Perris Bypass Pipeline MWD-SC 18"	20,974	269	269	187	1,982				
28J	443.44	Lake Perris		MWD-SC 54" MWD-SC 78"	187	187	187	364	23,000				
				Calif. State Park Lake Perris Recreation	0								
				MWD Total:	164,704	139,722	0	0	1,982				

Table 32. Water Quality At Selected SWP Locations

July 2004

Constituent	Units	Thermalito Afterbay At Outlet	North Bay Aqueduct Barker Slough Pumping Plant	Banks Pumping Plant	Delta Mendota Canal At McCabe Rd.	California Aqueduct				Devil Canyon Afterbay Near San Bernardino
						O'Neill Forebay Outlet (Check 13)	Kettleman City (Check 21)	Near Hwy 119 (Check 29)	Tehachapi Afterbay (Check 41)	
Alkalinity	mg/l as CaCO ₃	39	79	57	61	70	66	67	66	78
Antimony	mg/l	NR	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NR	NR
Arsenic	mg/l	<0.001	0.003	0.002	0.003	0.003	0.003	0.003	0.003	0.003
Beryllium	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron	mg/l	<0.1	0.1	<0.1	<0.1	0.1	0.1	0.1	0.1	0.2
Bromide	mg/l	NR	0.02	0.10	0.11	0.12	0.12	NR	0.16	0.15
Calcium	mg/l	8	14	13	14	15	15	16	17	20
Carbon - Dissolved Organic	mg/l as C	NR	3	2	3	3	2	3	3	3
Carbon - Total Organic	mg/l as C	NR	4	2	3	3	3	3	3	3
Chloride	mg/l	1	13	43	35	51	50	52	53	66
Chromium	mg/l	<0.001	0.001	0.002	0.001	0.002	0.001	0.002	0.002	0.002
Copper	mg/l	<0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.008
Fluoride	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hardness	mg/l as CaCO ₃	32	76	65	68	79	79	81	84	99
Iron	mg/l	<0.005	<0.005	0.009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Lead	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Magnesium	mg/l	3	10	8	8	10	10	10	10	12
Manganese	mg/l	<0.005	0.010	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	0.008
Nitrate + Nitrite	mg/l as N	<0.01	0.36	0.23	NR	0.28	0.38	0.38	0.41	0.56
Phosphorus-Ortho	mg/l as P	<0.01	0.13	0.06	NR	0.08	0.08	<0.01	0.08	0.09
Phosphorus-Total	mg/l	0.01	0.22	0.09	NR	0.10	0.08	0.07	0.11	0.10
Selenium	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sodium	mg/l	3	16	29	25	35	34	36	38	47
Specific Conductance	µS/cm	83	233	295	285	354	348	357	358	444
Sulfate	mg/l	2	15	15	18	23	23	24	25	37
Total Dissolved Solids	mg/l	50	134	163	159	195	193	198.5	203	250
Turbidity	NTU	2	60	10	14	5	8	8	9	2
Zinc	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

mg/l milligrams per liter

µg/l micrograms per liter

µS/cm microSiemens per centimeter

NR - Not Reported

NTU - nephelometric turbidity units

Table 33. Water Quality At Selected Delta Stations

July 2004

Date	Antioch Tides (feet above mean sea level)		Flow In CFS		Rio Vista	Electrical Conductivity in milliSiemens/cm								Cl in mg/l	
			Net Delta Outflow Index			Antioch	Chippis Island	Emmaton		Jersey Point		Clifton Court	Cache Slough	Delta Mendota Canal	
	Highest High Tide	Actual High Half Tide	Mean Daily	Monthly Average	md	md	md	14dm	md	14dm	md	md	md	md	md
1	4.18	1.59	7,662	7,662	9,204	2.13	0.00	0.86	0.74	0.59	0.61	0.28	0.44	0.30	80
2	4.13	1.59	7,279	7,470	9,781	1.92	0.00	0.79	0.71	0.57	0.59	0.30	0.39	0.30	81
3	4.14	1.65	7,352	7,431	9,923	2.07	7.12	0.77	0.68	0.59	0.57	0.34	0.37	0.30	81
4	4.03	1.65	7,591	7,471	10,051	2.03	6.84	0.72	0.65	0.59	0.55	0.33	0.37	0.30	80
5	3.82	1.65	7,420	7,461	10,363	1.76	6.50	0.64	0.63	0.58	0.55	0.33	0.43	0.31	69
6	3.46	1.61	7,158	7,410	10,596	1.58	6.11	0.53	0.62	0.56	0.54	0.33	0.45	0.30	66
7	3.10	1.64	6,505	7,281	10,679	1.59	5.65	0.49	0.61	0.55	0.54	0.31	0.48	0.29	65
8	3.04	1.52	5,447	7,052	10,545	1.45	5.23	0.34	0.60	0.53	0.54	0.33	0.53	0.30	65
9	3.06	1.25	6,560	6,997	10,886	1.41	5.11	0.26	0.59	0.51	0.55	0.31	0.51	0.29	69
10	3.06	1.10	5,560	6,853	11,113	1.32	4.92	0.24	0.58	0.51	0.55	0.32	0.54	0.28	68
11	3.25	1.20	6,241	6,798	11,561	1.32	4.80	0.24	0.57	0.54	0.56	0.31	0.59	0.27	68
12	3.25	1.39	6,574	6,779	11,809	1.52	5.62	0.27	0.56	0.60	0.56	0.31	0.61	0.27	65
13	3.48	1.45	6,591	6,765	11,793	1.67	5.98	0.32	0.53	0.62	0.57	0.30	0.60	0.28	67
14	3.45	1.43	6,752	6,764	12,013	1.70	5.79	0.32	0.49	0.64	0.57	0.29	0.52	0.27	67
15	3.46	1.40	6,701	6,760	12,055	1.64	5.80	0.32	0.45	0.64	0.57	0.28	0.47	0.26	66
16	3.45	1.42	6,737	6,758	12,109	1.69	5.92	0.37	0.42	0.66	0.58	0.29	0.45	0.25	66
17	3.57	1.46	6,624	6,750	12,053	1.77	6.13	0.39	0.39	0.67	0.59	0.29	0.44	0.25	65
18	3.50	1.43	6,751	6,750	12,017	1.71	6.06	0.38	0.36	0.66	0.59	0.29	0.41	0.25	65
19	3.39	1.40	7,205	6,774	12,254	1.66	5.90	0.36	0.34	0.65	0.60	0.28	0.38	0.27	65
20	3.22	1.27	7,345	6,803	12,274	1.53	5.39	0.30	0.33	0.62	0.60	0.28	0.40	0.27	64
21	2.93	1.24	7,591	6,840	12,204	1.54	4.82	0.27	0.31	0.61	0.60	0.30	0.39	0.26	68
22	2.73	1.31	6,352	6,818	11,776	1.36	5.07	0.27	0.31	0.62	0.61	0.29	0.39	0.27	68
23	2.74	1.26	5,736	6,771	11,173	1.30	4.81	0.23	0.31	0.60	0.62	0.31	0.42	0.27	68
24	2.88	1.14	5,541	6,720	10,906	1.28	4.46	0.23	0.30	0.58	0.62	0.32	0.42	0.27	70
25	3.03	1.00	5,648	6,677	11,352	1.25	4.10	0.20	0.30	0.56	0.62	0.33	0.45	0.28	69
26	3.59	1.32	6,032	6,652	11,536	1.32	4.64	0.23	0.30	0.59	0.62	0.33	0.47	0.27	70
27	4.05	1.70	5,474	6,608	11,117	1.52	6.02	0.32	0.30	0.67	0.63	0.32	0.42	0.26	72
28	4.05	1.84	5,771	6,579	10,947	1.91	7.14	0.47	0.31	0.71	0.63	0.33	0.42	0.26	75
29	4.26	1.82	5,622	6,546	11,076	1.93	7.17	0.58	0.33	0.72	0.64	0.34	0.42	0.27	74
30	4.26	1.80	6,880	6,557	11,226	2.01	7.15	0.60	0.34	0.70	0.64	0.34	0.43	0.27	75
31	4.23	1.64	6,136	6,543	11,011	1.99	6.89	0.60	0.36	0.68	0.64	0.40	0.43	0.28	76

Clifton Court Cl(mg/l)=200X EC - 25

e = Estimated

N.R. = No Record.

N.C. = Not computed due to insufficient data.

f = Excess Delta conditions with fish concerns.

r = Excess delta conditions with export/inflow ratio concerns.

s = Balanced water conditions with storage withdrawals.

dm = Daily Mean

md = Mean Daily

Table 34. Pesticides, Herbicides, and Other Organic Substances Detected In the SWP

July 2004

Sampling Location	Sample Date 1/	Chemical Detected	Concentration µg/l 2/
North Bay Aqueduct At Barker Slough Pumping Plant	June 15, 2004	Trifluralin Diuron	0.01 0.34
California Aqueduct At Banks Pumping Plant	June 16, 2004	Trifluralin Diuron	0.01 0.3
O'Niell Forebay Outlet Check 13	June 16, 2004	Simazine Diuron	0.04 0.55
Delta Mendota Canal At McCabe Road	June 16, 2004	Diuron	0.25
California Aqueduct Near Highway 119 (Check 29)	June 15, 2004	Diazinon Metolachlor Simazine Diuron	0.01 0.1 0.05 0.59
California Aqueduct Near Kettleman City (Check 21)	June 15, 2004	Diuron Simazine	0.35 0.06
California Aqueduct At Tehachapi Afterbay (Check 41)	June 16, 2004	Simazine Trifluralin Diazinon Diuron	0.05 0.01 0.01 0.57
Devil Canyon Headworks	June 16, 2004	Simazine Diuron	0.03 0.3

1/ Locations are normally sampled during March, June, and September. Monthly reports will include data for the month in which samples were most recently taken.

2/ Micrograms per liter.

Table 35. Oroville and Delta Field Divisions Energy Data

(in kWh)

July 2004

Date	Oroville Thermalito Complex		Barker Slough Pumping Plant	Cordelia Pumping Plant Load	Banks Pumping Plant		South Bay Pumping Plant Load	Del Valle Pumping Plant Load
	Generation	Load			Total Load	SWP Load		
1	8,799,552	2,592	42,070	33,075	1,549,440	1,549,440	325,275	142
2	12,842,496	0	47,327	37,492	1,943,040	1,943,040	325,870	147
3	12,146,688	0	48,720	37,499	2,218,176	2,218,176	323,670	147
4	12,100,032	0	44,023	33,229	2,201,088	2,201,088	323,425	157
5	11,663,712	0	46,228	34,307	2,482,176	2,482,176	324,105	169
6	11,761,632	0	52,318	38,500	2,728,320	2,728,320	324,010	169
7	13,446,432	0	53,816	40,754	3,233,856	3,233,856	340,510	162
8	15,016,320	0	46,116	38,297	3,554,688	3,554,688	226,260	153
9	15,353,568	0	53,046	40,999	3,664,128	3,664,128	166,625	152
10	13,242,240	0	49,777	39,788	3,835,776	3,835,776	415,120	156
11	15,024,672	0	46,410	36,477	3,934,272	3,934,272	444,300	163
12	13,167,072	0	47,124	38,549	3,885,888	3,885,888	450,795	168
13	13,552,416	0	51,198	39,529	3,940,992	3,940,992	381,720	161
14	13,955,040	0	47,894	39,074	3,951,360	3,651,360	390,120	158
15	13,761,216	0	47,565	39,305	3,946,176	3,646,176	412,025	170
16	12,016,512	0	54,887	40,922	3,949,248	3,649,248	447,445	184
17	10,005,984	0	47,089	38,248	3,933,312	3,633,312	436,360	174
18	11,767,968	0	45,857	37,247	3,945,984	3,645,984	441,170	176
19	12,644,064	0	48,027	38,787	3,936,192	3,636,192	454,650	175
20	11,090,016	0	43,904	36,848	4,018,944	3,718,944	446,290	171
21	10,512,288	0	54,236	39,928	3,922,944	3,337,944	419,835	167
22	10,343,520	0	56,847	41,762	3,908,160	3,323,160	424,910	178
23	11,588,832	0	60,501	43,029	3,751,680	3,166,680	405,945	169
24	11,180,160	0	50,491	38,598	3,916,416	3,331,416	402,330	166
25	11,538,432	0	45,647	36,757	3,914,112	3,329,112	403,640	166
26	10,367,136	0	47,236	38,157	3,974,400	3,389,400	411,875	176
27	11,942,784	0	47,474	38,269	3,925,056	3,340,056	416,315	174
28	11,512,512	0	55,328	40,215	3,624,960	3,039,960	403,945	166
29	11,347,488	0	57,799	41,062	3,692,544	3,107,544	404,065	271
30	11,037,312	0	56,574	41,363	3,342,720	2,457,720	396,140	208
31	10,123,200	0	45,934	36,477	3,602,688	2,717,688	370,300	155
Total	374,851,296	2,592	1,541,463	1,194,543	108,428,736	99,293,736	11,859,045	5,250

Table 36. San Luis Field Division Energy Data

(in kWh)

July 2004

Date	Dos Amigos Pumping Plant		Gianelli Pumping-Generating Plant			
	Total Load	SWP Load 1/	Total Generation	SWP Generation 1/	Total Load	SWP Load 1/
1	2,709,648	1,674,648	2,764,512	1,608,512	0	0
2	2,870,496	1,835,496	2,475,072	1,319,072	0	0
3	2,782,224	1,747,224	2,156,832	1,000,832	5,760	5,760
4	2,759,472	1,727,472	2,046,816	792,816	3,744	3,744
5	2,265,120	1,230,120	1,824,768	372,768	1,440	1,440
6	2,588,976	1,553,976	1,409,760	287,760	5,760	5,760
7	2,751,696	1,716,696	1,734,048	330,048	0	0
8	2,712,816	1,677,816	1,654,560	296,560	0	0
9	2,741,328	1,706,328	1,123,488	-27,512	93,024	93,024
10	2,752,416	1,717,416	1,900,224	-169,776	376,704	376,704
11	2,617,200	1,585,200	0	0	691,776	691,776
12	2,353,824	1,318,824	1,398,528	18,528	7,200	7,200
13	2,376,288	1,341,288	1,394,496	14,496	396,288	396,288
14	2,452,032	1,627,032	614,592	-15,408	8,640	8,640
15	2,593,440	1,768,440	727,776	97,776	6,912	6,912
16	2,624,688	1,799,688	821,376	-18,624	6,912	6,912
17	2,549,232	1,724,232	833,472	-6,528	7,200	7,200
18	2,620,656	1,804,656	624,960	-5,040	278,496	278,496
19	2,434,608	1,609,608	1,270,944	325,944	7,200	7,200
20	2,338,992	1,648,992	1,234,656	604,656	6,912	6,912
21	2,516,544	1,826,544	430,272	210,272	10,656	10,656
22	2,378,160	1,688,160	642,816	342,816	7,200	7,200
23	2,478,096	1,788,096	1,065,600	625,600	8,064	8,064
24	2,496,960	1,806,960	411,264	-28,736	10,080	10,080
25	2,426,544	1,874,544	0	0	18,144	18,144
26	2,265,408	1,710,408	800,064	360,064	9,504	9,504
27	2,230,272	1,675,272	248,256	248,256	11,520	11,520
28	2,554,128	1,999,128	0	0	18,720	18,720
29	2,618,928	2,063,928	653,184	653,184	10,080	10,080
30	2,455,344	1,900,344	1,292,256	1,292,256	8,928	8,928
31	2,282,112	1,727,112	1,219,968	1,219,968	6,912	6,912
Total	78,597,648	52,875,648	34,774,560	11,750,560	2,023,776	2,023,776

1/ Negative values may appear in SWP columns and indicate a mismatch of scheduled CVP energy and actual pumping; adjustments to SWP water shares are made to balance the mismatch.

Table 37. San Joaquin Field Division Pumping Plant Energy Load Data

(in kWh)

July 2004

Date	Coastal Branch					California Aqueduct			
	Las Perillas	Badger Hill	Devils Den	Bluestone	Polonio	Buena Vista	Teerink	Chrisman	Edmonston
1	41,772	106,656	91,750	88,490	89,900	1,639,080	1,742,256	3,787,488	13,734,720
2	41,902	105,952	97,550	93,395	98,700	1,757,736	1,835,496	4,009,536	14,565,600
3	56,212	142,152	93,380	89,720	92,510	1,897,344	1,952,496	4,273,056	15,498,720
4	45,460	114,128	121,965	117,005	120,960	1,815,408	1,969,272	4,398,336	15,959,520
5	36,648	93,896	73,835	71,520	76,055	1,662,480	1,808,352	3,962,016	14,382,000
6	36,450	91,656	87,065	85,290	90,990	1,679,688	1,742,256	3,797,280	13,882,320
7	44,690	112,360	111,955	104,220	108,015	1,814,904	1,861,200	4,061,952	14,572,080
8	40,878	105,104	77,335	73,750	77,495	1,792,728	1,828,224	3,994,848	14,261,040
9	37,384	95,400	111,235	106,475	111,195	1,797,768	1,858,320	4,085,280	14,800,320
10	48,916	126,288	94,965	90,395	95,840	1,870,704	1,950,768	4,305,024	15,718,320
11	48,830	123,528	94,785	90,415	94,410	2,004,840	2,137,248	4,794,624	17,398,080
12	35,812	90,992	97,010	92,510	98,560	1,518,336	1,611,216	3,540,096	12,838,320
13	38,422	98,456	98,005	92,360	98,490	1,744,488	1,840,104	4,070,592	14,757,120
14	38,606	98,192	85,020	80,380	86,575	1,777,680	1,794,816	3,941,568	14,145,840
15	45,100	114,256	96,955	91,610	97,615	1,662,408	1,708,632	3,724,416	13,401,360
16	40,096	101,824	93,715	88,740	94,525	1,772,280	1,766,016	3,910,176	14,175,360
17	47,642	123,216	84,270	80,860	85,940	1,800,288	1,887,768	4,153,536	15,068,160
18	43,646	112,872	96,545	90,590	96,370	1,967,832	2,174,328	4,898,592	18,113,760
19	34,668	89,304	98,005	93,755	99,220	1,773,432	1,863,072	4,111,488	14,839,920
20	36,820	97,480	96,305	92,365	97,305	1,760,688	1,856,520	4,112,064	14,847,120
21	41,178	108,112	84,055	78,875	84,255	1,831,896	1,855,152	4,067,424	14,730,480
22	37,942	99,288	88,825	84,825	89,800	1,784,880	1,883,952	4,155,264	15,109,920
23	31,646	82,416	88,225	81,725	89,570	1,776,816	1,851,912	4,044,960	14,659,200
24	43,318	111,120	71,985	68,815	71,565	1,936,440	1,993,032	4,389,120	15,868,080
25	44,416	112,856	116,340	110,975	116,060	1,814,328	1,997,568	4,450,464	16,795,440
26	34,740	88,992	86,520	81,675	88,205	1,609,632	1,722,456	3,807,648	13,869,360
27	36,970	93,800	89,165	83,920	88,945	1,730,232	1,758,024	3,901,248	14,252,400
28	38,966	102,416	83,980	80,725	83,760	1,775,952	1,808,352	3,970,944	14,387,040
29	36,334	94,528	95,855	91,180	97,250	1,809,720	1,876,680	4,112,928	15,032,160
30	33,170	87,088	83,595	79,345	83,165	1,632,312	1,753,776	3,891,168	14,139,360
31	40,852	109,464	83,335	78,515	83,130	1,727,136	1,807,344	3,966,912	14,695,920
Total	1,259,486	3,233,792	2,873,530	2,734,420	2,886,375	54,939,456	57,496,608	126,690,048	460,499,040

Table 38. Southern Field Division Energy Data

(in kWh)

July 2004

Date	West Branch			East Branch			
	Oso Pumping Plant Load	Warne Powerplant Generation	Castaic Powerplant SWP Generation	Alamo Powerplant Generation	Pearblossom Pumping Plant Load	Devil Canyon Powerplant Generation	Mojave Siphon Powerplant Generation
1	753,536	1,695,312	2,880,000	373,856	2,023,992	3,819,744	232,512
2	746,536	1,722,528	2,880,000	382,172	2,000,988	3,878,112	235,221
3	893,144	1,733,616	2,880,000	390,488	2,071,272	3,873,408	248,157
4	910,672	1,767,096	2,880,000	408,968	2,141,280	3,836,928	260,148
5	711,872	1,721,160	2,880,000	402,976	2,211,948	3,703,488	271,467
6	766,136	1,702,224	2,880,000	351,596	1,995,492	3,820,320	242,235
7	771,120	1,709,784	2,880,000	393,932	2,057,112	3,833,760	263,676
8	797,552	1,709,496	2,880,000	355,376	1,916,796	3,820,608	222,579
9	765,968	1,716,768	2,880,000	380,604	2,071,836	3,761,472	246,708
10	839,104	1,654,344	2,880,000	412,496	2,103,660	3,911,712	264,873
11	1,009,456	1,627,992	2,880,000	418,040	2,249,052	3,949,440	272,202
12	739,424	1,594,944	2,880,000	319,144	1,884,624	3,773,376	247,422
13	717,808	1,784,880	2,880,000	402,864	2,014,500	3,650,400	232,911
14	748,272	1,715,544	2,880,000	366,464	1,978,104	3,839,712	243,390
15	748,272	1,719,000	2,880,000	332,584	1,836,492	3,763,296	197,085
16	698,544	1,698,264	2,880,000	362,460	2,256,360	3,884,832	266,616
17	823,312	1,677,960	2,880,000	361,564	1,878,744	3,836,448	233,016
18	1,048,544	1,731,096	2,880,000	414,344	2,440,332	3,758,016	282,408
19	802,424	1,715,760	2,880,000	384,440	2,066,676	3,945,024	264,285
20	784,952	1,605,672	2,880,000	395,360	2,088,216	3,784,032	248,388
21	784,280	1,565,856	2,880,000	401,940	2,172,264	3,676,320	264,264
22	826,560	1,717,344	2,880,000	376,348	2,155,140	3,674,976	273,546
23	722,400	1,647,720	2,880,000	387,576	1,972,908	3,958,464	250,572
24	791,896	1,641,096	2,880,000	407,652	2,232,672	3,695,808	270,690
25	897,288	1,569,672	2,880,000	411,908	2,230,896	3,945,024	267,876
26	724,192	1,751,904	2,880,000	386,204	2,149,128	3,594,336	249,270
27	744,744	1,693,008	2,880,000	406,532	2,291,040	3,989,856	277,284
28	775,936	1,716,696	2,880,000	379,036	1,842,372	3,784,704	215,733
29	787,080	1,714,104	2,880,000	387,744	2,049,504	3,641,664	248,094
30	716,576	1,792,296	2,880,000	366,184	2,099,664	3,674,976	244,545
31	744,968	1,203,768	2,880,000	384,832	2,090,100	3,784,512	238,434
Total	24,592,568	52,016,904	89,280,000	11,905,684	64,573,164	117,864,768	7,775,607